M

C.I. AC44857

County Borough of Blackburn.

ANNUAL REPORT

UPON THE

Health of Blackburn

For the Year 1934.

BY

V. T. THIERENS, M.B., Ch.B. (L'pool), D.P.H. (Cambridge),
MEDICAL OFFICER OF HEALTH,
ADMINISTRATIVE TUBERCULOSIS OFFICER,
MEDICAL SUPERINTENDENT OF THE CORPORATION ISOLATION HOSPITALS
AND MUNICIPAL MATERNITY HOME,
SCHOOL MEDICAL OFFICER.

BLACKBURN.
THOMAS BRIGGS (BLACKBURN) LTD., 73 NORTHGATE.

County Borough of Blackburn.

ANNUAL REPORT

UPON THE

Health of Blackburn

For the Year 1934.

BY

V. T. THIERENS, M.B., Ch.B. (L'pool), D.P.H. (Cambridge),
Medical Officer of Health,
Administrative Tuberculosis Officer,
Medical Superintendent of the Corporation Isolation Hospitals
and Municipal Maternity Home,
School Medical Officer.

BLACKBURN.
Thomas Briggs (Blackburn) Ltd., 73 Northgate.

CONTENTS.

PAGE
Abattoir 63–71
Ambulance Facilities 31
Ante-Natal Care 146
Anti-Toxin, Diphtheria 95
Ash Receptacles 41
Anthrax 62, 97

Bacteriological and Pathological Examinations 109, 175
Births 17
Blind, Care of the 177

Canal Boats 40
Cancer .... 24 to 27
Cattle Market 63
Census 14, 15
Child Mortality .... 157 to 161
Cost of Public Health Department... 16
Climate 178
Cleansing Station 110
Closet Accommodation 41
Clinics 10
Common Lodging-houses 39
Contagious Diseases of Animals Acts 61–63
Conversions 41
Children (Boarded Out) 171
Crippling 116

Dairies 54
Deaths 21–24
Dental Work 117, 165
Diarrhœa 97
Diphtheria .... 93 to 96, 103–106
Disinfection 110
Dispensary—Tuberculosis— 113 114, 120

Education on Health 176
Encephalitis Lethargica 97
Enteric Fever 96, 107

Factory and Workshops Acts 45
Farms 54
Fertilizers and Feeding Stuffs Act ... 76
Food and Drugs Acts 72–75
Food 53–76
Food, Preparing Places 61
Foot and Mouth Disease 61

Hospital for Infectious Diseases...... 98–109
Hospital Accommodation 30
Hospital, Maternity .... 148 to 150
Housing 37–39
Houses Let in Lodgings 39
Home Nursing 176

Ice Cream 72
Illegitimate Children 169
Infant Consultations 162–164
Infantile Mortality.. .... 157 to 161
Infectious Diseases 78–110
Infant Welfare Visitors' Work...166, 167

Lavatory Accommodation 41
Local Government Act 175

PAGE
Maternity and Child Welfare ...145 to 172
Maternity Hospital .... 148 to 150
Marriages 17
Maternity Homes 170
Measles 96
Meat Inspection 63–71
Mental Defectives 175
Merchandise Marks Act 76
Meteorology 178
Midwives' Acts 147–148
Milk, Tuberculous 57
Milk (Mothers and Children Order)... 168
Milk 55–60
Mortality in Connection with Childbirth 151 155

Natural Increase in Population 17
Neo-Natal Mortality 156
Notification of Births Acts 156
Notification of Infectious Diseases 78–83
Nuisances 42
Nurses, District 176
Nursing Homes, Registration 170

Offensive Trades 40
Ophthalmia of the Newly-born 162
Occupational Statistics 27–30

Parasitic Mange 62
Poor Relief 31
Population 16
Pregnancy, Deaths due to 151–155
Premature Births 157
Puerperal Sepsis 150

Queen's Park Hospital 30, 108

Refuse, Collection of 41
Royal Infirmary 31, 108, 134–139

Sanatorium 115–116, 126–130
Sanitary Work, Details of 36–51
Scarlet Fever 85–92, 100–103
Scavenging 41, 42
Sewers 41
Slaughter-houses 63–71
Smoke Nuisance 47
Staff 9
Still-Births 156
Smallpox 84–85

Tents and Vans 40
Tuberculosis 111–131
Tuberculosis Dispensary......113–114, 120

Ultra-Violet Light Clinic........117, 174
Vaccination 98
Vans 40
Venereal Diseases .... 134 to 144
Veterinary Inspector's Report ... 54–71
Vital Statistics 13, 33

Ward Statistics 18, 19
Water 36
Whooping Cough 96
Workshops 45

Health Committee.

THE MAYOR (C. A. CRITCHLEY, Esq., J.P.).
Alderman F. J. GREEVES, J.P., L.R.C.P., Chairman.

Aldermen—
FISH, HEYES, FRYARS, SMETHURST, and GRIMSHAW.

Councillors--

CAMPBELL
CARMICHAEL
CASWELL
DOWDALL
EDDIE
GREENWOOD
HOLDEN, B. (Vice-Chairman)
HORNE
LIVESEY
MOTTERSHEAD
RILEY
SHORROCK
SMETHURST
TAYLOR, J. T.
TAYLOR, J. W.

With the Addition of the following :—

For Maternity and Child Welfare Purposes :
Mesdames CAMPBELL, J. COTTON, HOLMES, W. TATTERSALL, B.Sc.,
WALSH, and Miss HOWARD.

Public Health Officers of the Local Authority.

Medical Officer of Health—

V. T. THIERENS, M.B., Ch.B., D.P.H.

Deputy Medical Officer of Health and Tuberculosis Officer—

I. M. McLACHLAN, M.D., B.S., B.Hy., D.P.H.

Assistant Medical Officers of Health—

E. D. IRVINE, M.D., M.R.C.S., L.R.C.P., D.P.H.
DOROTHEA I. BAIRD, M.B., Ch.B. (Edin.), D.P.H.

Dental Surgeons—

H. YATES, L.D.S.
A. E. B. NOBLE, L.D.S.

Part Time Medical Officers—

W. BRIGGS, M.B., B.S. (Orthopaedic Surgeon).
R. Y. AITKEN, F.R.C.S. (Puerperal Fever Consultant).
J. M. WISHART, F.R.C.S.E. (Oculist and Laryngologist).
W. CRAN DUTHIE, M.B., C.M. (M.O. i/c Male Venereal Diseases Clinic).
J. A. SELLARS, M.B., B.Ch., B.A.O. (Radiologist).

Pathologists—

Pathological work is carried out by the Pathologists at the Blackburn and East Lancashire Royal Infirmary and the Manchester and Liverpool Public Health Laboratories.

District Medical Officers—

D. O'DRISCOLL, M.B., Ch.B., B.A.O.
C. M. BRADLEY, L.R.C.P., L.R.C.S.
G. B. MESSENGER, L.M.S.S.A.
H. SOUTHWORTH, M.B., Ch.B.

Public Vaccinators—

D. O'DRISCOLL, M.B., Ch.B., B.A.O.
C. M. BRADLEY, L.R.C.P., L.R.C.S.
G. B. MESSENGER, L.M.S.S.A.
G. A. FLEMING, M.B., Ch.B.
D. KELLEHER, M.B., Ch.B., B.A.O.
J. B. LEIGH, M.B., Ch.B.
H. SOUTHWORTH, M.B., Ch.B.

Vaccination Officer—

G. G. DICKINSON.

Public Analyst—

W. H. ROBERTS, M.Sc., F.I.C.

Veterinary Inspector and Chief Meat Inspector—

E. J. BURNDRED, M.C., M.R.C.V.S., D.V.H.

*H. KENYON, Chief District Sanitary Inspector.

*W. H. GOODMAN, Assistant Meat Inspector.

*H. W. FOWLER, Special Inspector for Food and Drugs, etc. (From April, 1934).

*O. H. WILLIAMS, Special Inspector for Food and Drugs, etc. (died February, 1934).

District Inspectors—

*J. W. MARGINSON. *W. WALNE. *J. A. SHAW.
*J. MARGINSON.

Lady Health Visitors—

§†*Miss LOWE. §*Miss STANANOUGHT. §‡†Miss BELL.
†‡*Miss THOMPSON. †‡§Miss SUDWORTH.
§†‡Miss FRANKS. §†‡Miss JONES.

Matron, Corporation Hospital—§‡†Miss CRITCHLEY.

Matron, Springfield Maternity Home—§‡†Miss HUGHES (Commenced February, 1934).

Tuberculosis Nurse—§‡†Miss WILLIAMS.

Chief Clerk—THOMAS FOWLER.

Clerks—

§H. WALSH. *J. R. MARSDEN. Miss E. COMBERBACH. Miss C. HAWORTH
§C. AINSWORTH. J. MATHER. §H. ROTHWELL. F. BRIGGS.

Disinfectors—

F. HOLDEN. J. SLEVIN.

---

*Holders of Certificates of the Royal Sanitary Institute.

†Certificated Midwives.

‡Trained Nurses.

§A contribution to the salaries of these Officers is made from Exchequer grants.

CLINICS.

NAME.	PURPOSE.	WHERE HELD.	TIMES.
Inspection Clinic.	Special Examination of Cases Referred by Teachers, School Attendance Officers and School Nurses.	68, Victoria Street.	Wednesdays, 2 p.m. Saturdays, 9-30 a.m.
Ophthalmic Clinic.	Prescription of Spectacles.	68, Victoria Street.	Mondays, 1-30 p.m. Fridays, 1-30 p.m.
Dental Clinic.	Dental Treatment.	,,	Every week-day by appointment.
Minor Ailments Clinic.	Treatment of Minor Ailments, Diseases of Skin, etc.	68, Victoria Street.	Every week day, at 8-45 a.m.
,,	,,	All Saints' School, Bolton Road.	Mondays to Fridays at 2-0 p.m.; Saturdays, 9-0 a.m.
Cleansing Station	Treatment of Scabies and Cleansing of Verminous Cases.	Throstle Street.	Tuesdays and Thursdays (by appointment).
Throat Clinic.	Operative Treatment of Adenoids and Enlarged Tonsils.	Blackburn and East Lancs. R. Infirmary.	Arranged as required.
,,	,, (In-Patients).	Queen's Park Hospital.	Arranged as required.
Remedial Exercises.	Treatment of Deformities.	68, Victoria Street.	Every week-day (by appointment).
Tuberculosis Clinic.	Diagnosis and Treatment of Tuberculosis.	Dispensary, Duke Street.	Every week-day (except Thursday), at 2 p.m. Tuesday, 7-0 p.m.
Orthopædic Clinic.	Supervision of Cripples, etc.	68, Victoria Street.	Third Friday in each month, at 4-0 p.m.
Maternity and Child Welfare Centres.	Child Welfare.	Bent Street School.	Monday, 2-0 p.m.
	,,	Kendal St. School.	Monday, 2-0 p.m.
	,,	Hozier St. School.	Tuesday, 2-0 p.m.
	,,	Cornelian St. Institute.	Tuesday, 2-0 p.m.
	,,	All Saints' Sch. Bolton Road.	Wednesday, 2-0 p.m.
	,,	Hozier St. School.	Thursday, 2-0 p.m.
	,,	Kendal St. School.	Thursday, 2-0 p.m.
	,,	Griffin Parochial Hall	Friday, 2-0 p.m.
Ante-Natal Clinic.		68, Victoria Street.	Wednesday and Friday, at 10-0 a.m.
Special Ante-Natal Clinic.	(V.D.)	,,	Tuesday, 10-0 a.m.
Strabismus Clinic.	Correction of Squint in infants under school age.	,,	By special appointment.
Venereal Diseases Clinics.	(V.D.)	Royal Infirmary.	*Men*: Tuesday, 5-30 p.m. Friday, 6-0 p.m. *Women*: Monday, 5-30 p.m. Thursday, 6 p.m.
Ultra-Violet Light Clinic	Artificial Light Treatment.	Corporation Hospital.	Mondays, Tuesdays, Thursdays & Fridays, 2 p.m.
,,	,,	68, Victoria St.	Every week-day by appointment.
X-Ray Clinic.	X-Ray Examinations.	,,	By appointment.
Diphtheria Immunisation Clinic.	Prevention of Diphtheria.	68, Victoria Street.	Monday, 10-0 a.m. Monday, 4-30 p.m. Thursday, 10-0 a.m.

Public Health Office,

Blackburn,

May, 1935.

Mr. Chairman, Ladies and Gentlemen,

I beg to present the Annual Report upon the Health of Blackburn for 1934, which has been compiled on lines indicated by the Ministry of Health.

It is with deep regret that I record the death, which occurred in February, of Mr. O. H. Williams, Food and Drugs Inspector, after thirty years' loyal and efficient service given to the Health Department.

I would take this opportunity of thanking all members of the Health Department Staff for the zeal and loyalty which they have, one and all, displayed during the year.

It is once again a privilege to express to the members of the Health Committee my appreciation of the sympathy and interest which they have displayed in the work of this Department.

I am,

Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

V. T. THIERENS.

PART I.

Vital Statistics
and
Social Conditions.

TABLE 1. CENSUS, 1931.

Wards	Acreage (Land and Inland Water)	Total Population.					Private Families and Dwellings.				
		1921	1931								
		Persons	Persons	Males	Females	Persons per Acre	Private Families	Population in Private Families	Structurally Separate Dwellings Occupied	Rooms Occupied	Persons per Room
Blackburn	7653	126922	122697	56238	66459	16·0	33815	117746	32696	144055	0·82
Park	651	9479	9052	4084	4968	13·9	2353	8418	2321	9928	0·85
St. Andrew's	1146	10930	10783	4983	5800	9·4	3062	10666	2975	12739	0·84
St. John's	101	7186	6520	2979	3541	64·6	1835	6310	1790	8001	0·79
St. Luke's	168	7572	7333	3412	3921	43·6	2023	7222	1962	7917	0·91
St. Mark's	403	10427	9979	4467	5512	24·8	2752	9807	2703	12506	0·78
St. Mary's	174	5525	5147	2474	2673	29·6	1295	4564	1138	4882	0·93
St. Matthew's	107	9321	8561	3977	4584	80·0	2341	8328	2323	9584	0·87
St. Michael's	623	8975	8580	3986	4594	13·8	2541	8511	2472	10691	0·80
St. Paul's	123	9771	8929	4014	4915	72·6	2566	8780	2442	10770	0·82
St. Peter's	133	6719	6213	2932	3281	46·7	1612	5754	1454	6336	0·91
St. Silas's	985	9009	9108	3911	5197	9·2	2693	8793	2609	14202	0·62
St. Stephen's	1171	11076	13215	6115	7100	11·3	3756	13074	3662	15795	0·83
St. Thomas's...	1718	12068	11255	5241	6014	6·6	2746	9793	2692	11925	0·82
Trinity	150	8864	8022	3663	4359	53·5	2240	7726	2153	8779	0·88

TABLE 1—(*Continued*).

COMPARISONS BETWEEN 1921 AND 1931.

WARDS	Acreage	TOTAL POPULATION.					PRIVATE FAMILIES AND DWELLINGS.				
		1921	1931								
		Persons	Persons	Males	Females	Persons per Acre	Private Families	Population in Private Families	Structurally Separate Dwellings Occupied	Rooms Occupied	Persons per Room
BLACKBURN	+233	126922	—4225	—1548	—2677	— 1·1	+2207	—5778	+1748	+7071	—0·29
PARK	...	9479	— 427	— 143	— 284	— 0·7	+ 22	— 739	— 10	+ 37	—0·23
ST. ANDREW'S	+225	10930	— 147	— 10	— 137	— 2·2	+ 315	— 15	+ 289	+1277	—0·23
ST. JOHN'S	...	7186	— 666	— 287	— 379	— 6·5	— 41	— 812	— 40	— 21	—0·34
ST. LUKE'S	...	7572	— 239	— 59	— 180	— 1·5	+ 87	— 330	+ 90	+ 164	—0·12
ST. MARK'S	...	10427	— 448	— 215	— 233	— 1·1	+ 91	— 574	+ 110	+ 791	—0·35
ST. MARY'S	...	5525	— 378	— 142	— 236	— 2·2	+ 24	— 499	— 74	— 277	—0·09
ST. MATTHEW'S	...	9321	— 760	— 283	— 477	— 7·1	— 16	— 873	— 11	— 32	—0·18
ST. MICHAEL'S	...	8975	— 395	— 105	— 290	— 0·6	+ 287	— 423	+ 230	+ 898	—0·30
ST. PAUL'S	...	9771	— 842	— 378	— 464	— 6·9	+ 34	— 954	— 3	— 99	—0·30
ST. PETER'S	...	6719	— 506	— 318	— 188	— 3·8	+ 31	— 516	— 43	— 271	—0·14
ST. SILAS'S	...	9009	+ 99	+ 69	+ 30	+ 0·1	+ 253	— 58	+ 192	+ 886	—0·88
ST. STEPHEN'S	+ 8	11076	+2139	+1026	+1113	+ 1·8	+1065	+2070	+1027	+3948	—0·25
ST. THOMAS'S...	...	12068	— 813	— 312	— 501	— 0·4	+ 20	—1126	+ 23	+ 93	—0·26
TRINITY	...	8864	— 842	— 391	— 451	— 5·6	+ 35	— 929	— 32	— 323	—0·17

VITAL STATISTICS.

	1934
Area (in Acres)	8,080*
Population (Census, 1931)	122,697
,, (Estimated middle of 1934)	119,880
Number of Inhabited Houses (1931)	32,696
Number of Families or Separate Occupiers (1931)	33,815
Rateable Value	£709,563
Sum Represented by a Penny Rate	£2,675
Rate in the £ (excluding Water) 1934-1935	12/6†
Gross Expenditure on Health Social Services	£55,521
Income on Health Social Services	£17,303‡
Net Expenditure on Health Social Services	£38,218

† *Subject to 2½% discount for early payment, making a net rate of* 12/2·25*d.*

‡ *This sum does not include any money received through the Block Grant.*

Live Births	Legitimate	1370	M. 766	Birth Rate	12·0
	Illegitimate	71	F. 675		

Number of women dying in, or in consequence of, child-birth, from—

Sepsis	3	1·98	per 1,000 births & stillbirths
Other Causes	6	3·97	

Still Births				70
Rate per 1,000 total births				46·3
Deaths	M. 775 F. 806	1581	Death Rate	13·1
Percentage of total deaths occurring in public institutions				44·4

Deaths of infants under one year of age per 1,000 live births :—

Legitimate	56·2
Illegitimate	70·0

Deaths rate from Measles (all ages)	0·00
,, Whooping Cough (all ages)	0·04
,, Diarrhœa (under two years of age) (Per 1,000 births).	4·85

* In February the Minister of Health made an Order for the alteration of certain areas within the County in accordance with the provisions of Section 46 of the Local Government Act, 1929, whereby part of the Urban District of Rishton (107 acres), and part of the Blackburn Rural District, comprising the Township of Witton (319 acres) were transferred to the County Borough.

Births :—The births registered were 1,441, of which 71 were illegitimate. The total male births were 766, and female 675. The birth rate was 12·0 per 1,000, compared with 14·8 for England and Wales, and 14·7 for the 121 great towns.

TABLE 2.

Year.	*Birth Rate.*	*Death Rate.*	*Natural Increase* 1,000 *Population.*
1921	19·5	12·7	6·8
1922	16·8	14·2	2·6
1923	16·2	13·4	2·8
1924	15·3	14·0	1·3
1925	14·9	13·9	1·0
1926	14·0	12·9	1·1
1927	13·7	14·9	–1·3
1928	13·8	12·2	1·5
1929	12·4	14·9	–2·5
1930	12·7	12·8	—0·08
1931	12·4	12·8	—1·7
1932	12·6	12·6	0·008
1933	12·0	14·4	—2·4
1934	12·0	13·1	—1·1

The death rate of Blackburn males was 14·1, and of females 12·4 per 1,000 living of each sex.

Marriages.—There were 1,128 marriages solemnized during the year as follows : Established Churches, 494 ; other places of worship, 407 ; Register Office, 227.

TABLE 3.

WARD DEATH RATES IN RELATION TO PERSONS PER ACRE AND ROOM SPACE.

1931 CENSUS.

Ward.	*Death Rate.*	*Persons per Acre.*	*Rooms per Person.*
St. Stephen's	12·1	11·2	1·19
Trinity	12·3	53·4	1·09
St. Michael's	14·6	13·7	1·24
St. John's	12·7	64·5	1·22
St. Silas'	11·7	9·2	1·55
St. Paul's	13·7	72·5	1·20
St. Peter's	12·3	46·7	1·01
St. Mary's	17·6	29·5	0·94
St. Matthew's	14·2	81·0	1·11
St. Thomas's	12·2	6·4	1·06
Park	12·0	13·9	1·09
St. Luke's	15·3	43·6	1·08
St. Mark's	13·7	24·7	1·25
St. Andrew's	12·3	9·4	1·09

TABLE 4.

DEATH RATES IN WARDS FOR THE PAST SIX YEARS.

Ward.	1929	1930	1931	1932	1933	1934	*Av. for 6 Years*
St. Stephen's ..	17·8	16·0	17·1	12·1	12·0	12·1	14·5
Trinity	14·1	12·5	13·9	13·1	12·8	12·3	13·1
St. Michael's	14·7	7·8	12·1	12·5	13·6	14·6	12·5
St. John's	11·8	13·4	12·0	14·6	17·0	12·7	13·6
St. Silas's	15·1	13·0	14·9	13·0	14·5	11·7	13·7
St. Paul's	15·7	13·7	14·8	12·7	16·0	13·7	14·4
St. Peter's	16·2	13·1	15·5	15·3	14·4	12·3	14·5
St. Mary's	18·1	19·0	16·6	12·4	15·4	17·6	16·5
St. Matthew's ..	12·6	11·9	13·3	12·6	15·8	14·2	13·4
St. Thomas's ..	15·7	12·4	12·3	11·9	14·1	12·2	13·1
Park	15·7	12·9	12·9	12·3	16·1	12·0	13·6
St. Luke's	15·2	11·6	14·6	11·7	14·0	15·3	13·7
St. Mark's	10·9	10·9	12·5	11·2	14·5	13·7	12·3
St. Andrew's	15·3	12·6	15·0	12·4	14·0	12·3	13·6
Borough	14·9	12·8	14·1	12·6	14·4	13·1	13·6

TABLE 5.

VITAL STATISTICS DURING 1934.

WARDS	Population	Births	Deaths	Birth-Rate	Death-Rate	Deaths under one year per 1000 Births	Death-rate from six Zymotic Diseases excluding Diarrhœa	Death-rate from Diarrhœa	Death-rate from Bronchitis & Pneumonia	Death-rate from Pulmonary Tuberculosis	Death rate from Non-Pulmonary Tuberculosis
ST. STEPHEN'S	12911	210	157	16·2	12·1	57	0·15	0·07	1·54	0·61	0·07
TRINITY	7840	75	97	9·5	12·3	26	0·12	0·00	1·40	0·89	0·00
ST. MICHAEL'S	8392	96	123	11·4	14·6	62	0·11	0·11	2·50	0·23	0·11
ST. JOHN'S...	6366	64	81	10·0	12·7	93	0·00	0·00	1·88	2·31	0·00
ST. SILAS'S...	8896	59	104	6·6	11·7	16	0·22	0·00	0·89	0·33	0·11
ST. PAUL'S...	8715	137	120	15·7	13·7	43	0·22	0·11	2·63	0·11	0·00
ST. PETER'S	6078	89	75	14·6	12·3	45	0·16	0·00	2·79	0·82	0·00
ST. MARY'S	5035	68	89	13·5	17·6	103	0·59	0·19	2·97	0·99	0·00
ST. MATTHEW'S...	8368	78	119	9·3	14·2	141	0·11	0·23	1·67	0·95	0·11
ST. THOMAS'S	10993	103	135	9·3	12·2	48	0·00	0·18	1·45	0·36	0·18
PARK	8847	135	107	15·2	12·0	44	0·00	0·00	1·69	0·45	0·22
ST. LUKE'S	7156	102	110	14·2	15·3	78	0·00	0·00	2·51	0·69	0·13
ST. MARK'S	9746	97	134	9·9	13·7	20	0·30	0·00	2·25	0·61	0·00
ST. ANDREW'S	10537	128	130	12·1	12·3	47	0·19	0·00	1·70	0·66	0·19
BOROUGH	119880	1441	1581	12·0	13·1	56	0·15	0·06	1·91	0·55	0·09

TABLE 6.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1934 AND PREVIOUS YEARS.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un-corrected Number	Nett.				of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number	Rate	Number	Rate			Number	Rate per 1,000 Nett Births.	Number	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1924	129000	2013	1980	15·3	2013	15·4	250	47	167	84·3	1810	14·0
1925	126900	1948	1902	14·9	1973	15·5	251	45	186	97·7	1767	13·9
1926	124400	1802	1743	14·0	1795	14·4	240	61	156	89·5	1616	12·9
1927	124500	1764	1702	13·7	2128	17·0	327	63	131	77·0	1864	14·9
1928	125100	1803	1730	13·6	1758	14·0	275	52	139	80·3	1535	12·2
1929	125300	1637	1554	12·4	2102	16·7	305	74	125	80·4	1871	14·9
1930	125300	1683	1595	12·7	1911	15·2	345	39	133	83·3	1605	12·8
1931	123900	1690	1539	12·4	2045	16·5	349	59	94	61·0	1755	14·1
1932	122200	1659	1543	12·6	1864	15·2	379	57	103	66·7	1542	12·6
1933	121400	1575	1457	12·0	2033	16·7	326	52	104	71·3	1759	14·4
1934	**119880**	**1536**	**1441**	**12·0**	**1843**	**15·3**	**312**	**50**	**82**	**56·9**	**1581**	**13·1**

TABLE 7.

DEATHS REGISTERED DURING THE CALENDAR YEAR 1934 CLASSIFIED BY AGE AND CAUSE.

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents," whether occuring within or without the District.											Total Deaths whether of "Residents" or "non-Residents" in Institutions in the District.
	All Ages	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 35 years.	35 and under 45 years.	45 and under 55 years.	55 and under 65 years.	65 years and upwards.	
1	2	3	4	5	6	7	8	9	10	11	12	13
All Causes Certified	1561	79	13	17	26	41	63	89	203	396	734	819
Uncertified	20	3	..	..	..	..	..	..	1	4	12	..
Enteric Fever	..	..	..	..	..	..	..	..	..	..	.	..
Small Pox	4	..	..	..	2	1	..	..	..	1	.	2
Measlos	..	..	..	..	..	..	..	..	..	..	..	..
Scarlot Fever	5	..	..	1	1	1	1	..	..	..	1	1
Whooping Cough	5	1	3	1	..	..	..	..	..	..	..	1
Diphtheria and Croup	4	..	..	1	2	..	..	..	..	1	..	5
Influenza	11	..	..	..	..	..	2	1	1	3	4	..
Erysipelas	4	..	..	..	..	1	..	1	..	..	2	3
Tetanus	..	..	..	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis	67	..	..	1	1	14	14	11	21	5	..	36
Tuberculous Meningitis	4	2	..	..	2	..	..	..	..	..	..	5
Other Tuberculous Diseases	7	..	..	..	..	..	3	1	2	1	..	3
Cancer, Malignant Disease	211	..	..	..	..	..	3	8	35	57	108	95
Acute Rheumatism and Rheumatic Fever	7	..	..	..	..	1	3	..	1	..	2	5
Cerebro-Spinal Meningitis	..	..	..	..	..	..	..	..	..	..	..	2
Encephalitis Lethargica	4	..	..	1	.	.	2	.	1	..	..	3
Other Forms of Meningitis (not T.B.)	3	1	..	.	1	1	..	..	..	..	..	2
Poliomyelitis	..	..	..	..	.	..	..	..	..	..	..	1
Locomotor Ataxy	1	..	..	..	..	..	..	..	..	1	..	1
General Paralysis of the Insane	6	..	..	..	..	1	..	1	2	1	1	2
Cerebral Hæmorrhage	71	1	..	..	..	..	..	3	7	19	41	17
Other Diseases of the Nervous Sys'm	38	1	..	2	..	..	1	3	3	11	17	20
Senile Decay	159	..	..	..	..	..	..	..	..	2	157	117
Organic Heart Disease	217	..	..	..	1	1	4	11	30	46	124	52
Arterio-Sclerosis	115	..	..	..	..	..	..	2	4	25	84	47
Aneurism	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Circulatory System	9	.	..	..	..	..	..	..	1	2	6	1
Bronchitis, Acute	15	2	..	1	2	..	..	1	1	3	5	2
Bronchitis, Chronic	97	1	..	1	..	..	1	1	15	18	60	35
Influenzal Broncho Pneumonia	5	..	..	..	..	1	1	..	..	1	2	..
Pneumonia (other forms)	113	4	7	2	1	5	8	17	21	19	29	52
Other Diseases of the Respiratory System	10	..	..	..	..	1	1	1	3	4	..	4
Diarrhœa and Enteritis	8	7	..	1	..	..	..	..	..	..	..	5
Appendicitis, Typhlitis and Peritonitis	8	..	..	2	1	1	1	1	1	1	..	15
Cirrhosis of the Liver	2	..	..	..	..	..	..	1	..	1	..	1
Alcoholism	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Digestive Sy'm	51	1	1	..	2	..	1	1	14	18	13	61
Nephritis and Bright's Disease	67	..	..	..	..	..	2	3	7	23	32	36
Other Diseases of the Urinary Sys'm	12	..	..	..	..	..	1	..	3	3	5	9
Puerperal Fever	3	..	..	..	..	1	1	1	..	..	..	6
Puerperal Pyrexia	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases and Accidents of Pregnancy and Parturition	6	..	..	..	..	..	4	2	..	..	..	12
Congenital Debility and Malforma'n	34	33	..	..	1	..	..	..	..	..	..	20
Premature Birth	25	25	..	..	..	..	..	..	..	..	..	10
Venereal Diseases	4	.	..	..	..	..	..	1	..	1	2	1
Other Diseases of the Reproductive System (Non-Malignant)	15	..	..	..	..	..	..	1	1	4	9	21
Violent Deaths (excluding Suicide)	53	2	2	2	3	6	3	4	5	7	19	53
Suicide	23	..	..	..	..	1	1	6	9	2	4	2
All other Dofined Diseasos	78	1	..	1	6	4	5	6	16	20	19	53
Diseases Ill-defined or unknown	..	..	..	..	..	..	..	..	.	..	..	..
All Causes	1581	82	13	17	26	41	63	89	204	300	746	819

TABLE 8.

CLASSIFICATION OF DEATHS ACCORDING TO DISEASE.

Cause of Death.	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	
	Total Deaths	Total Deaths	Total Deaths	Total Deaths	Total Deaths	Total Deaths	Total Deaths	Total Deaths	Total Deaths	Total Deaths	Total Deaths	Death Rate.
Enteric Fever	..	1	2	1	..	..	2	1	..	..	..	0·00
Smallpox	..	..	..	..	..	..	..	..	..	..	4	0·03
Measles	20	28	3	36	..	..	23	1	..	21	..	0·00
Scarlet Fever	1	3	1	1	..	2	..	..	1	2	5	0·04
Whooping Cough	7	16	20	1	4	8	5	15	9	2	5	0·04
Diphtheria and Croup	3	8	8	11	14	18	9	2	7	5	4	0·03
Influenza	69	34	23	74	19	65	7	52	31	61	11	0·09
Erysipelas	1	..	1	7	..	3	3	5	1	5	4	0·03
Phthisis (Pulmonary Tuberculosis)	85	90	106	96	82	114	105	97	79	84	67	0·55
Tuberculous Meningitis	4	9	2	2	7	4	9	7	5	5	4	0·03
Other Tuberculous Diseases	22	11	8	12	14	9	9	11	14	7	7	0·05
Cancer, Malignant Disease	184	160	166	160	163	192	185	213	202	202	211	1·76
Rheumatic Fever	..	2	..	5	2	2	3	4	8	9	7	0·05
Meningitis	11	18	9	5	14	18	8	11	6	3	3	0·02
Organic Heart Disease	204	211	198	269	334	315	279	240	192	189	217	1·81
Bronchitis	238	194	192	221	119	190	140	209	129	178	112	0·93
Pneumonia (all forms)	199	176	112	175	152	201	143	139	89	137	118	0·98
Other Diseases of Respiratory Organs	21	15	20	27	25	29	28	17	19	20	10	0·08
Diarrhœa and Enteritis	15	12	15	24	8	8	9	13	8	11	8	0·06
Appendicitis and Typhlitis	4	10	13	12	19	21	11	7	15	11	8	0·06
Cirrhosis of Liver	5	5	2	3	1	4	4	5	..	1	2	0·01
Alcoholism	..	..	1	1	..	..	..	1	..	..	..	0·00
Nephritis & Bright's Disease	51	44	59	40	31	66	76	75	72	86	67	0·55
Puerperal Fever	3	4	7	3	1	2	..	1	1	..	3	0·02
Other Accidents and Diseases of Pregnancy and Parturition	7	7	7	10	6	13	7	5	8	6	6	0·05
Congenital Debility and Malformation, including Premature Birth	59	68	76	66	71	57	75	38	66	52	59	0·49
Violent Deaths, excluding Suicide	49	46	52	60	50	72	57	60	63	57	53	0·44
Suicide	21	20	16	27	20	17	26	25	22	31	23	0·19
Other Defined Diseases	526	567	494	514	372	435	379	501	495	574	563	4·69
Diseases ill-defined or unknown	2	8	3	1	7	6	3	..	..	..	..	0·00
Total	1810	1767	1616	1864	1535	1871	1605	1755	1542	1759	1581	13·19

Deaths :—The total number of deaths registered was 1,581, of which 775 were males and 806 were females. The death rate was 13·1 per 1,000, compared with 11·8 for England and Wales and 11·8 for the 121 great towns.

CAUSES OF DEATH AND SICKNESS.

During 1934 the chief causes of death were as under :—

Disease.	*No. of Deaths.*		*Deaths per* 1,000.	
Organic Heart Disease	217	(189)	1·81	(1·55)
Pneumonia	118	(137)	0·98	(1·12)
Cancer	211	(202)	1·76	(1·66)
Bronchitis	112	(178)	0·93	(1·46)
Pulmonary Tuberculosis	67	(84)	0·55	(0·69)

The bracketed figures represent the corresponding number for 1933.

Diseases of bodily systems and group diseases to which death was assigned are as follows :—

Disease.	*No. of Deaths.*		*Deaths per* 1,000.	
Respiratory System (Non-Tubercular)	240	(335)	2·00	(2·75)
Circulatory System	341	(325)	2·84	(2·67)
Nervous System (Non-Tubercular)	123	(118)	1·02	(0·97)
Cancer	211	(202)	1·76	(1·66)
Tuberculosis (all forms)	78	(96)	0·65	(0·79)
Renal System (Non-Tubercular)	79	(102)	0·65	(0·84)
Infectious Diseases	33	(96)	0·27	(0·79)
Digestive Diseases	69	(58)	0·57	(0·47)
Diseases of Babyhood (under one year)	59	(52)	0·49	(0·42)
Diseases associated with Maternity	9	(6)	0·07	(0·04)

The bracketed figures represent the corresponding number for 1933.

CANCER.

The deaths from Cancer numbered 211, as compared with 202 in 1933; 202 in 1932; 213 in 1931; 185 in 1930; 192 in 1929; 163 in 1928; 160 in 1927.

The Death Rates from Cancer per 1,000 of the population for the past 12 years are as under:—

1923	1·37	1929	1·53
1924	1·42	1930	1·48
1925	1·26	1931	1·71
1926	1·33	1932	1·65
1927	1·28	1933	1·66
1928	1·30	1934	1·76

TABLE 9.

Deaths from Cancer Occurred at the Following Ages:

Age Period.	*Male.*	*Female*	*Total*	*No. of population at this age period.*	*Number of deaths per 1,000 persons living.*
Under 25 years	..	..	..	39560	0·00
25 and under 35 years	1	2	3	29850	0·10
35 ,, 45 years	2	6	8	18821	0·42
45 ,, 65 years	39	53	92	25175	3·65
65 years and over	56	52	108	6474	16·68
	98	113	211	119880	1·76

TABLE 10.

SITES OF FATAL CANCER.

Site.	*Male.*	*Female.*	*Total.*
Tongue and Mouth	8	2	10
Oesophagus	7	3	10
Stomach	24	14	38
Liver	6	9	15
Bowel and Abdominal ..	21	23	44
Rectum	7	6	13
Bladder	3	1	4
Larynx	—	1	1
Uterus	—	17	17
Breast	—	23	23
Pancreas	4	4	8
Gall Bladder	1	2	3
Bones	—	1	1
Lung	5	2	7
Male Genital Organs .	4	—	4
Others	8	5	13
TOTAL	98	113	211

RADIUM TREATMENT OF CANCER.

The appended abstract from the Royal Infirmary Report for 1934 indicates the scope and activity of the Infirmary Radium Clinic.

"The following is a summary of the number of cases and the various types of diseases treated during the year 1934 :—

DISEASES :	IN-PATIENTS :	OUT-PATIENTS :
Carcinoma—Forehead	2	3
,, Tongue	17	23
,, Fauces	—	1
,, Larynx	—	1
,, Pharynx	1	1
,, Roof of Mouth	3	3
,, Floor of Mouth	1	2
,, Palate	4	7
,, Tonsil	5	5
,, Cheek	4	5
,, Alveolus	4	6
,, Inner Canthus	—	1
,, Ear	2	2
,, Nose	4	5
,, Lip	4	7
,, Jaw	—	1
,, Thumb	—	1
,, Breast	22	33
,, Cervix	10	16
,, Vagina	2	2
,, Uterus	6	8
,, Vulva	1	3
,, Colon	1	1
,, Stomach	1	1
,, Prostate	2	3
,, Scrotum	1	3
,, Rectum	3	4
,, Penis	2	2
Paget's Disease of Nipple	2	2
Sarcoma—Antrum	1	1
,, Radius	1	1
Osteo-Sarcoma—Thigh	1	1
Epithelioma—Skin	3	7
Lupus	3	3
Nævus	14	20
Rodent Ulcer	8	67
Keloid Scar	2	2
Non-malignant	6	32
	143	286

During the year there has been a further marked increase in the number of cases treated both as Out-patients and In-patients, and the average number of attendances at the Out-patients' Clinic is increasing to such an extent that the present accommodation is quite inadequate.

It is certain that in the very near future the amount of radium available under our present arrangements with the Radium Institute will be quite insufficient to meet our requirements.

J. KEITH CUMMING, M.B., Ch.B. (Aberdeen)."

MORTALITY STATISTICS IN COTTON OPERATIVES.

The subjoined Tables are a continuation of those given in previous reports.

TABLE 11.

RESPIRATORY DISEASES (NON-TUBERCULAR).

DEATH-RATES PER 1,000 EMPLOYEES (1921 CENSUS).

DEATHS. | DEATH RATES.

Age Period.	Deaths: Weavers.		Spinners.	Winders, Warpers, etc.	Card Room Hands.	Other Cotton Operatives.	Borough.	Death Rates: Weavers.		Spinners.	Winders, Warpers, etc.	Card Room Hands.	Other Cotton Operatives.	Borough.
	M.	F.						M.	F.					
Years														
15—25..	..	..	..	..	..	..	7	..	..	..	..	...	..	0·3
25—35..	..	2	1	.	..	..	11	..	0·4	2·0	..	..	..	0·5
35—45..	2	3	..	1	..	..	20	1·7	0·8	..	1·2	..	..	1·0
45—55..	2	3	1	..	..	..	40	2·0	1·7	4·4	..	..	..	2·4
55—65..	5	1	..	2	..	2	45	7·5	1·4	..	7·6	..	9·3	4·2
65 and upwards ..	3	2	3	1	..	5	96	14·9	16 1	103·4	15·3	..	92·6	13·9
TOTAL	12	11	5	4	..	7	219	1·9	0·6	2·5	0·9	..	1·9	2·2
PULMONARY TUBERCULOSIS.														
15—25.. .. .	..	4	..	2	..	2	14	..	0·5	..	1·2	..	1·5	0·6
25—35..	..	1	1	1	2	..	14	..	0·2	2·0	0·9	5·5	..	0·6
35—45..	3	..	..	1	..	..	11	2·6	..	..	1·2	..	..	0·5
45—55..	..	1	..	..	..	..	21	..	0·5	..	..	..	..	1 3
55—65..	..	..	..	..	..	1	5	..	..	..	..	..	4·6	0·4
65 and upwards..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL	3	6	1	4	2	3	65	0·4	0·3	0·5	0·9	1·4	0·8	0·6

TABLE 11—*Continued.*

NON-PULMONARY TUBERCULOSIS.

Age Period.	Deaths. Weavers.		Deaths. Spinners.	Deaths. Winders, Warpers, etc.	Deaths. Card Room Hands.	Deaths. Other Cotton Operatives.	Deaths. Borough.	Death Rates. Weavers.		Death Rates. Spinners.	Death Rates. Winders, Warpers, etc.	Death Rates. Card Room Hands.	Death Rates. Other Cotton Operatives.	Death Rates. Borough.
	M.	F.						M.	F.					
Years														
15—25..	..	..	..	..	..	..	.	..	..	..	..	..	..	..
25—35..	..	..	..	..	..	1	3	..	..	..	..	..	1·1	0.1
35—45..	..	1	..	..	..	..	1	..	0·2	..	..	..	..	0·05
45—55..	..	..	..	..	..	..	2	..	..	..	..	..	..	0·1
55—65..	..	..	..	..	..	..	1	..	..	..	..	..	..	0·09
65 and upwards..	..	..	..	..	.	..	..	..	..	..	..	..	..	..
TOTAL	..	1	..	..	..	1	7	..	0·05	..	..	..	0·2	0·07

ALL OTHER DISEASES.

Age Period.	Deaths. Weavers. M.	Deaths. Weavers. F.	Deaths. Spinners.	Deaths. Winders, Warpers, etc.	Deaths. Card Room Hands.	Deaths. Other Cotton Operatives.	Deaths. Borough.	Death Rates. Weavers. M.	Death Rates. Weavers. F.	Death Rates. Spinners.	Death Rates. Winders, Warpers, etc.	Death Rates. Card Room Hands.	Death Rates. Other Cotton Operatives.	Death Rates. Borough.
15—25..	..	3	..	..	..	1	20	..	0·4	..	..	..	0·7	0·9
25—35	2	11	3	..	1	..	35	1·5	2·2	6·1	..	2·7	..	1·6
35—45..	4	7	1	5	2	3	57	3·4	2·0	2·7	6·1	7·4	4·4	2·8
45—55..	5	15	..	3	3	7	141	5·0	8·7	.	59·8	18·2	16·9	8·7
55—65..	14	19	3	5	1	5	249	21·2	28·1	25·6	19·1	11·6	23·2	23·3
65 and upwards..	46	21	24	11	5	31	650	228·8	169·3	802 7	169·2	238·1	574·0	94·6
TOTAL	71	76	31	24	12	47	1152	11·2	4·2	15·8	5·5	8·3	13·1	11·9
GRAND TOTAL...	86	93	37	32	14	58	1443	13·6	5·2	18·9	7·3	9·7	16·1	14·8

TABLE 12.

POPULATION, 1921 CENSUS.

Age Period.	Weavers.		Spinners.	Winders, Warpers, etc.	Card Room Hands.	Other Cotton Operatives.	Borough.
	M.	F.					
Years							
15—25..	2019	7009	723	1616	530	1329	21946
25—35..	1258	4892	490	1094	359	899	20876
35—45..	1151	3380	367	819	269	674	19878
45—55..	1000	1707	224	501	164	412	16052
55—65..	660	676	117	261	86	215	10647
65 and upwards.. . ..	201	124	29	65	21	54	6866
TOTAL	6289	17788	1950	4356	1429	3583	96265

HOSPITAL ACCOMMODATION.

There have been no developments or changes in the hospital or pathological services provided by the Health Committee.

QUEEN'S PARK HOSPITAL.

The staffing of the above Hospital has been fully described in previous Reports.

The appended Table classifies the accommodation for the sick at the Queen's Park Hospital :—

TABLE 13.

Classification of Wards	Number of Wards	BEDS AVAILABLE.			
		Men	Women	Children	Total.
Medical	4	43	89	..	132
Surgical	2	37	28	...	65
Children...	3	...	...	120	120
Chronic Sick... ...	5	64	64	...	128
Tuberculosis	1	18	4	15	37
Maternity	1	...	30	...	30
Mental	2	76	94	...	170
Other	...	7	...	...	7
TOTAL	18	245	309	135	689

The Hospital is a recognised training school for nurses.

(*b*) VOLUNTARY HOSPITALS.

The Blackburn and East Lancashire Royal Infirmary has accommodation for 244 in-patients. The beds are allotted as under :—

	Males.		*Females.*
General Medical	10	...	14
General Surgical	85	...	83
Children	11	...	11
Venereal Disease	2	...	2
Eye, Ear, Nose & Throat ...	11	...	15
TOTAL	119	...	125

AMBULANCE FACILITIES.

(1) *For Infectious Cases :—*

The Local Authority provide Two Motor Ambulances.

(2) *For Non-Infectious Cases : -*

Three Motor Ambulances are available, one provided by the Watch Committee, one by the Joint Committee of the British Red Cross Society and the St. John Ambulance Brigade, and one by the Public Assistance Committee.

The Ambulance Service is fully adequate for the needs of the Area.

PUBLIC ASSISTANCE.

I am indebted to Mr. C. B. Pye, Public Assistance Officer, for the appended particulars.

No. of residents in the County Borough in receipt of out-door relief :—

1st January, 1934	...	2468 families comprising 5493 persons.
1st July, 1934	...	2428 families, comprising 5308 persons.
1st January, 1935	...	2319 families, comprising 4605 persons.

No. of Blackburn persons relieved on the 1st January, 1935, in the--

Institution	718
Cottage Homes	69
Working Boys' Home	7

In addition there are a number of persons in the Institution, Cottage Homes and the Working Boys' Home who are chargeable to the Lancashire County Council.

Expenditure on out-relief to Blackburn persons during the 12 months ended 30th September, 1934, was £66,583/4/11.

No. of Blackburn persons in Queen's Park Hospital on the 1st January, 1935, included in the 718 mentioned above	340
Average No. of Blackburn persons in the Cottage Homes during 1934 (per day)	60
Total number of Beds in the Institution, 1st January, 1935	1250
Total number of Inmates on the same day (including persons chargeable to the Lancashire County Council)	1002
Total number of Inmates of the Institution on the 1st January, 1935, who were suffering from sickness, accident, bodily or mental infirmity, including aged and infirm persons requiring regular nursing care or treatment	971
Total number of Sick Children on the 1st January, 1934	116
Admitted during 1934	584
Discharged during 1934	552
Died during 1934	41
Total number of Sick Children on the 1st January, 1935	107
Number of Beds available for Casuals	98

There has been no change in the administration of Poor Law Medical Out-relief since the service was transferred to the Local Authority.

The districts, with populations, are as under:—

Districts.	*Population* 1931.
St. Matthew's Ward Park Ward St. Thomas's Ward	28868
St. Luke's Ward St. Paul's Ward St. Peter's Ward	22475
St. Mary's Ward St. Stephen's Ward Trinity Ward	26384
St. John's Ward St. Michael's Ward St. Silas' Ward	24208
St. Andrew's Ward St. Mark's Ward	20762

PART II.

Sanitary Circumstances.

WATER SUPPLY.

The town is supplied with an upland surface water, which has been satisfactory, both as regards quantity and chemical and bacteriological purity.

Appended are representative reports of bacteriological and chemical examinations carried out during the year:—

(*a*) CHEMICAL.

Numerical results expressed in parts per 100,000 :

Turbidity : *Nil.* Smell : Indistinct.

Colour : Brown.	
Oxygen absorbed... ... (4 hours at 27° C.)	0·160
Free and Saline Ammonia as NH_3	0·0008
Albuminoid Ammonia as NH_3	0·0072
Nitrous Nitrogen ... as NH_3	*nil.*
Nitric Nitrogen ... ... as NH_3	0·025
Chlorides ... ... as Cl.	0·95

Hardness : Clarke's Method :	
Temporary	0·6
Permanent	2·7
Total	3·3
Reaction, pH	6·5
Gases, dissolved Oxygen	—
Action on Lead ... ... 24 hours.	0·14
Iron present	Trace
Action on Copper ... .. 24 hours.	0·05

(*b*) BACTERIOLOGICAL.

Quantitative Analysis.	*Average Results of Two Examinations.*	
Non-liquefying bacteria	34	Total 44
Liquefying bacteria...	10	
Ærobic micro-organisms growing on standard agar in 48 hours at 37° C.	19	

	Quantity of water in which these bacteria were—	
Qualitative Analysis.	*found*	*not found*
Bacteria associated with sewage or fæcal pollution ... Bacillus coli	100 cc. ...	10 cc.

HOUSING.

(*a*) GENERAL.

Action taken in respect of temporary buildings	*None*
No. of Houses towards which a State Subsidy was paid	*Nil*

No. of Houses in course of erection at the end of 1934 :—

(*a*) By Private Enterprise	158
(*b*) By Corporation	52

Total No. of Houses within the Borough at December, 1933	34380
Total No. of Houses erected during 1934	220
	34600
No. of Houses included in Borough Extension	30
	34,630

The Rents of the various Corporation Houses (inclusive of Rates) are as follows :—

Parlour, 3 Bedrooms ...	16/9,* 16/3, 16/0, 15/5.
Non-Parlour, 3 Bedrooms ...	16/0,* 15/2, 14/11*, 14/5, 13/4, 11/1, 10/4†
Non-Parlour, 2 Bedrooms ...	11/3, 10/9, 10/6, 9/8†.
Flats, 2 Bedrooms	7/11.

* Positions around Park, or with Bay Windows.

† Without hot water circulation.

No. of applicants on Waiting List at end of 1934 :—

Parlour, 3 Bedrooms	*Nil*
Non-Parlour, 3 Bedrooms (Large)	*Nil*
Non-Parlour, 3 Bedrooms (Small)	142
Non-Parlour, 2 Bedrooms...	365

(*b*) STATISTICS :

1. INSPECTION OF DWELLING-HOUSES DURING THE YEAR :—

(1) (*a*) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)...	3993
(*b*) Number of inspections made for the purpose	13106
(2) (*a*) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	437
(*b*) Number of inspections made for the purpose	437

(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 43

(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation... 2142

2. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers 1632

3. ACTION UNDER STATUTORY POWERS DURING THE YEAR :—

A. Proceedings under sections 17, 18 *and* 23 *of the Housing Act,* 1930 *:*

(1) Number of dwelling-houses in respect of which notices were served requiring repairs 369

(2) Number of dwelling-houses which were rendered fit after service of formal notices :—

(*a*) By owners 237
(*b*) By local authority in default of owners 13

B. Proceedings Under Public Health Acts :

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 268

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—

(*a*) By owners 189
(*b*) By local authority in default of owners ... ...

C. Proceedings Under sections 19 *and* 21 *of the Housing Act,* 1930 :

(1) Number of dwelling-houses in respect of which demolition orders were made 0

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders 0

D. Proceedings Under section 20 *of the Housing Act,* 1930 :

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made... 0

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit 0

HOUSING CONDITIONS.

The policy of reconditioning has been continued throughout the year, and at the time of writing this Report 600 houses have already been dealt with, and approximately 400 houses are in the process of reconditioning.

A special survey has been carried out with a view to ascertaining the prevalence of overcrowding in the Borough. Based on inadequate floor area, deficient cubic space, or unsatisfactory grouping of the sexes, 150 private dwelling-houses have been found to be overcrowded. This number does not include families living under overcrowded conditions in houses-let-in-lodgings.

The number so far ascertained does not fully represent the extent of overcrowding. It is probable that a minimum of 250—300 families are living under such conditions.

In December, 1933, seven areas containing a total of 36 dwellings and 11 "other buildings," were declared clearance areas. The Council made clearance orders in respect of these seven areas in October, 1934. The owners of properties in six of the seven areas lodged objections, which were heard at a Local Inquiry in December. Arising out of the inquiry four Orders (Daisy Lane, Crook Street, Denville Street and Meadow Lane) were confirmed in their entirety, and the Brunswick Street, Spring Lane and Nab Lane Orders were confirmed with only slight modifications (seven buildings, used as stores or stables, being excluded).

Houses-Let-in-Lodgings.

The number (78) of houses-let-in-lodgings is less than in 1933, when 81 such houses were on the register. These houses provide 463 rooms, of which 75% were occupied, compared with 471 rooms, and 82% occupancy in 1933. Although the majority of the houses comply with the bye-laws, the accommodation provided is, generally speaking, unsatisfactory, and in the absence of additional legislation will ever remain so.

COMMON LODGING HOUSES.

There are 18 Common Lodging Houses in the Borough, which provide accommodation for 733 persons.

In all these houses the domestic conveniences are of a much higher standard than those provided at the majority of houses let in lodgings. Facilities for the storing and preparation of food, for personal ablution, etc., are in most cases satisfactory.

The bye-laws relating to these premises are adequate.

TENTS, SHEDS, CARAVANS, ETC.

At the end of the year there were 56 caravans in the Borough used as human habitations.

Constant sanitary survey is necessary if the caravans and their surroundings are to be kept in a cleanly and sanitary state.

During the year 98 visits were paid to this class of dwelling, the majority of which were maintained in a sanitary state.

The general cleanliness of the travelling vans which came to Blackburn during the Easter holidays was satisfactory.

The bye-laws in force are adequate.

CANAL BOATS ACTS, 1877 and 1884.

Seventy-three boats were inspected during the year. There are 43 boats on the register.

Four infringements of the Acts were detected as follows :—

Master without Certificate.
Boat in a leaky condition.
Boat not properly marked.
No water vessel.

OFFENSIVE TRADES.

The number of offensive trades within the Borough is 29, of which 17 are bone, and rag and bone dealing, four are fat extraction or fat rendering, two are gut-scraping, four are tripe-boiling, and two knackering

Nuisances arising in connection with offensive trades are influenced by the amount of care exercised in the storage of the raw material and waste products. Careless methods of storage and production have been responsible for the majority of nuisances reported, and attention paid to these details has resulted generally in abatement of the nuisance complained of.

SANITARY ACCOMMODATION.

1.—*Sanitary Accommodation* :—

Privies	1
Pail Closets	153
Slop Water Closets	2025
Fresh Water Closets	39498
TOTAL	41677

Conversions :—	*During* 1934	1928-1933 *Inclusive*
Pails by Owners	2	9
Pails by Corporation	2	3
Tipplers to Fresh Water Closets (by Owners)	49	230
Tipplers to Fresh Water Closets (by Corporation)	6	17
Wet Pits by Owners	Nil	13
Privies to Pails	Nil	13

2.—*New Sewers* :—

New Sewers laid during the year :—

15-in. diameter	123 lineal yards.
12-in. diameter	501 lineal yards.
9-in. diameter	446 lineal yards.

3.—*Lavatory and Urinal Accommodation* :—

The same as last year.

4.—*Collection of Refuse* :—

	Loads.	*Tons.*	*Cwts.*	*Qrs.*
House Refuse	13769	24118	17	2
Market Refuse	931	1090	2	1
Midden Refuse	1	0	10	0
Shop and Trade Refuse	842	739	17	2

5.—*Ashpit Conversions* :—

No. of Ashpits Abolished	3
No. of Bins substituted in lieu of same	3

Approximate :—

No. of Ashbins in use	36976
No. of Dry Ashpits in use	8
No. of Wet Ashpits in use	1
No. of Excreta Pails in use	153
No. of Tanks in use	7

SCAVENGING AND PUBLIC CLEANSING.

The arrangements for scavenging and public cleansing are similar to those described in the Report for 1933.

SANITARY INSPECTION OF THE AREA.

The appended Tables classify, in tabular form, inspections carried out by the Sanitary Inspectors during the year, their findings and action taken in respect thereof.

TABLE 14.

INSPECTION WORK.

	1934
No. of Complaints by Inhabitants	423
No. of Complaints referred from other Departments	347
No. of Nuisances Discovered as Result of :—	
Complaints by Inhabitants	1895
Visiting Cases of Infectious Diseases	262
Complaints from other Departments	451
Notifications of H.M. Inspector of Factories	10
Routine Inspection Visits	3020
Housing and Town Planning Inspections	6468
Visits to Factories and Workshops	17
Total number of Defects found	12616
Total number of Defects remedied	6255
No. of Informal Notices Served	2480
No. of Formal Notices Served	637
No. of Informal Notices complied with	1632
No. of Formal Notices complied with	439
No. of Interviews	483
No. of Letters sent out	46

Particulars of sanitary improvements made and defects remedied under the supervision of the Sanitary Inspectors are contained in the following Table :—

TABLE 15.

DWELLING HOUSES.

Insufficient closet accommodation	1
Water supply improved	20
Cleansed and limewashed	175
Overcrowding abated	6
Damp and defective house, walls, roofs, etc.	562
Defective gutters and downspouts	433
Cleansing dirty floors	24
,, ,, woodwork	1
,, ,, dirty yards	36
,, ,, bedding	6
,, ,, windows	2
,, ,, gully traps	16
,, ,, cellar areas	2
Obstructive buildings removed	—
Defective sink waste pipes	171
Defective dishstones	42
Waste pipes disconnected from drain	—
Yards and passages reflagged	7
Flooding of houses	—
Yards badly paved or flagged	187
Insufficient lighting and ventilation of rooms	131
Defective chimney flues	53
Window sash frames, cords, internal walls, ceilings, floors, stairs, fireplaces, doors, cupboards to be repaired	3288
Dangerous and defective chimney stacks	51
Fractured internal walls	19
Gas pipes repaired	7
Water pipes repaired	26
Yard division walls	64
Defective and bulging external walls	77
Absence of handrails to staircases	260
Outbuildings repaired	155
Washing Accommodation provided	18
Food Cupboards provided	112

BAKEHOUSES.

Cleansed and limewashed	38
Sanitary accommodation improved	—
Drains repaired	—
Animals removed	—
Other nuisances abated	2

DAIRIES, COWSHEDS, AND MILKSHOPS.

Reconstructed	1
Dairy	3
Middensteads	—
Floors repaired	6
Improved Lighting	—
Improved ventilation	—
Improved drainage	—
Cubic space increased	—

Dairies, Cowsheds, and Milkshops—*Continued.*

Internal walls and ceilings repaired	8
Improved yard space	2

ICE CREAM MANUFACTORIES.

Cleansing and limewashing	102
Sanitary conditions improved	26

SCHOOLS.

Playgrounds—repairs to drains	—
,, repairs to asphalte.	—
,, repairs to paving	—
,, repairs to flags	—
Urinals repaired or improved	—
Sanitary accommodation repaired or improved	—

WORKSHOPS & WORKPLACES.

Cleansed and limewashed	12
Provided with sufficient sanitary accommodation	—
Sanitary condition improved	3
Ventilation improved	—
Overcrowding abated	—
Drains repaired	—
Other nuisances abated	—

DRAINS.

Re-layed	58
Cleansed or repaired	185
Intercepting traps provided	—
Soil pipes repaired	26
Self-cleansing gullies provided	26

WATER CLOSETS.

Cleansed	85
Repaired	56
Cisterns and flushing fittings repaired	142
Provided in substitution of slop-water closets	5

PAIL CLOSETS.

Nuisance abated	—
Converted from privies	—

OFFENSIVE TRADES PREMISES.

Limewashed	29

COMMON LODGING-HOUSES.

Cleansed and limewashed	36
Other nuisances abated	—

TABLE 15—(*Continued*).

OFFENSIVE ACCUMULATIONS.

Removed	68

ANIMALS SO KEPT AS TO BE A NUISANCE.

Nuisances abated	4

SEWERS.

Cleansed	13

SLOP-WATER CLOSETS.

Nuisances abated	6
Converted to W.C.'s	5

ASHPITS.

Abolished	42

ASH RECEPTACLES.

Repaired	—
Portable receptacles provided	359

STABLE PREMISES.

Removing manure	13
Reconstructed middensteads	—

HOUSES LET IN LODGINGS.

Nuisances abated	1

CANAL BOATS.

Leaky condition	1
Cover to water cask provided	—
Boat not registered	—
Master without Certificates	1
Boat not properly marked	1
Unsuitable certificate	—
Water Vessel provided	1

Details of Inspection Work.

Schools	43
Tents, Vans, Sheds	98
Factories	19
Workshops	303
Workplaces	31
Bakehouses—Ordinary	206
Underground	3
Cowsheds	200
Dairies and Milkshops	1024
Ice Cream Premises	485
Offensive Trade Premises	161
Fried Fish Shops	64
Common Lodging Houses	497
Stable Premises	111
Offensive Accumulations	63
Animals so kept as to be a nuisance	4
Sewers	13
Street Gullies	111
Canal Boats	73
Smoke Observations	87
Theatres and Cinemas	90
Houses Let-in-Lodgings	1871
Dirty Houses	155
Common Yards, Back Roads and Passages	3615

Infected Houses	2767
Small Pox Contacts	6762
Housing and Town Planning Acts...	5455
Fishmongers and Greengrocers	198
Ashes Receptacles	601
Food Preparing and Storing Places.	232
Outworkers' Premises	2
Enquiries *re* Milk Supply	3
Dwelling Houses *re* Nuisances	3930
Samples of—	
Milk purchased for Sediment Test	672
Milk Purchased for Chemical analysis	208
Milk purchased for bacteriological analysis	144
Labelling of Condensed Milk Tins.	447
Insufficient Water Supply	145
Miscellaneous	64
Merchandise Marks Acts	1107
Special Inspections *re* Overcrowding	175

TABLE 16.

FACTORIES, WORKSHOPS AND WORKPLACES.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

PREMISES. (1)	NUMBER OF		
	Inspections (2)	Written Notices (3)	Prosecutions (4)
FACTORIES (Including Factory Laundries)	19	3	...
WORKSHOPS (Including Workshop Laundries)	303	7	..
WORKPLACES (Other than Outworkers' premises)	31	—	...
TOTAL	353	10	...

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

PARTICULARS. (1)	Number of Defects.			Number of offences in respect to which prosecut'ns were instituted. (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
Nuisances under the Public Health Acts :—				
Want of Cleanliness	3	3	...	...
Want of Ventilation	...	...	...	...
Overcrowding	...	...	...	...
Want of drainage of floors	...	...	...	...
Other Nuisances	...	...	...	...
Sanitary Accommodation :—				
Insufficient	...	...	..	...
Unsuitable or defective	4	3	...	...
Not separate for sexes	...	...	...	...
Offences under the Factory and Workshops Acts :—				
Illegal occupation of underground bakehouse (s. 101)	...	...	...	..
Other offences (Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)	10	10	...	...
TOTAL	17	16	...	...

FACTORIES AND WORKSHOPS.

TABLE 17.

This Table contains particulars of matters referred by the Factory Inspector and of action taken by the Health Department in respect thereof :—

Factories.

Sanitary Accommodation : Sanitary conveniences for females opens direct off the cutting room, no intervening ventilated space being provided to same.

Notice sent and alterations were carried out.

Sanitary conveniences for male and female employees not provided with intervening ventilated spaces.

The necessary alterations were completed before an inspection of the premises was made.

Workshops.

Sanitation. Walls and ceiling of workroom required limewashing.

Notice sent. Work completed.

Limewashing overdue.

Notice sent. Work completed.

Limewashing overdue.

Work in progress at time of inspection.

Bakehouse requires limewashing.

Notice sent. Work completed.

Walls and ceiling of bakehouse requires limewashing.

Notice sent. Work completed.

Limewashing overdue.

Completed previous to inspection.

Cleanliness : Walls, etc., of bakehouse require limewashing.

Notice sent. Work completed.

Sanitation : (1) Sanitary accommodation was not kept in a cleanly state.

(2) No intervening ventilated space between sanitary convenience and workroom.

Notice sent. Work partially completed. Premises not now in use.

SMOKE OBSERVATIONS.

During the year 91 smoke observations were made, and in one smoke was emitted in excessive quantities. In this instance the premises were visited by the sanitary inspector, who gave verbal notice to abate, investigated the cause and advised as to prevention. In all instances this course of action has been sufficient to secure abatement.

The standards of smoke permissible from a factory chimney in Blackburn are as follows :—

One boiler..	4 minutes black smoke in the hour
Two boilers	5 ,, ,, ,,
Three boilers	6 ,, ,, ,,
Four boilers or more	7 ,, ,, ,,

TABLE 18. SANITARY ACCOMMODATION IN SCHOOLS, 1934.

Schools	No. on Rolls	No. of Pedestal Water Closets Flushed with		No. of Trough Closets Together with No. of Seats Flushed :		Urinals.		Remarks.
		Separate Cisterns	Automatic Cisterns	Auto-matically.	By Hand	No. with Sparge Pipes	No. without sparge Pipes	
Accrington Road	268	30	—	—	—	14	—	
Audley C.	683	39	—	—	—	20	—	
Bank Top C.	284	2	—	—	12	6	10	
Bangor Street	537	—	26	—	—	18	—	
Blakey Moor C.	828	7	28	—	—	20	—	
Cedar Street C.	366	18	—	—	—	16	—	
Christ Church C.E.	579	—	15	6	5	7	8	
Emmanuel	328	—	—	21	—	—	30	
Furthergate C.	245	—	—	14	—	8	—	
Four Lanes End	158	—	—	8	—	—	10	
Griffin C.E.	262	2	12	—	—	10	6	
Holy Trinity C.E.	413	1	16	—	—	5	10	
Intack Council	461	20	—	—	—	12	—	
Lower Darwen C.	98	—	9	—	—	—	5	
Mill Hill C.	276	7	16	—	—	—	20	
Moss Street C.	256	2	11	—	—	5	5	
C.E. Central	697	2	13	—	—	18	—	
Park Road C.	299	13	—	—	—	—	5	
Regent Street Special ...	12	2	6	—	—	3	—	
St. Aidan's C.E.	258	12	4	—	—	10	—	
St. Alban's R.C.	878	21	—	—	—	—	10	
St. Alban's H.G. (Boys) ...	188	6	—	—	—	—	10	
St. Anne's R.C.	687	3	—	20	—	—	9	
St. Andrew's C.E.	167	—	—	11	—	—	6	
St. Barnabas' C.E.	364	—	13	—	—	—	8	
St. Bartholomew's	232	—	—	13	—	—	12	

TABLE 18—*Continued.* SANITARY ACCOMMODATION IN SCHOOLS, 1934.

SCHOOLS	No. on Rolls	No of Pedestal Water Closets Flushed with		No of Trough Closets together with No. of Seats Flushed:		Urinals.		Remarks.
		Separate Cisterns	Automatic Cisterns	Auto-matically.	By Hand	No. with Spargo Pipes	No. without sparge Pipes	
St. Gabriel's C.E.	148	—	—	7	—	—	4	
St. James' C.E.	61	—	3	4	—	8	—	
St. James' B.A.M.	70	—	—	10	—	2	6	
St. James', Guide	201	1	9	—	—	—	8	
St. John's C.E.	479	—	—	23	—	9	—	
St. Joseph's R.C.	496	—	—	14	—	—	9	
St. Luke's C.E.	261	—	14	—	—	—	9	
St. Peter's R.C.	496	2	25	—	—	17	—	
St. Michael's C.E.	166	—	—	6	7	12	—	
St. Matthew's C.E.	363	1	—	12	—	—	10	
St. Mary's R.C.	559	1	—	10	—	4	4	
St. Paul's C.E.	366	—	13	—	—	20	—	
St. Peter's C.E.	180	15	—	—	—	—	15	
St. Stephen's C.E.	290	1	—	21	—	7	—	
St. Silas' C.E.	352	—	16	—	—	12	—	
St. Thomas' C.E.	473	—	12	—	—	—	12	
Sacred Heart R.C.	131	1	—	7	—	2	2	
Wensley Fold C.E.	238	2	8	—	—	12	—	
Witton Infants'	48	—	6	—	—	6	—	
Roe Lee Park.....	245	18	—	—	—	18	—	
Juvenile Unemployed Training Centre Schools:								
Maudsley Street	—	1	—	9	—	8	—	
Audley Range	—	—	—	13	—	9	—	

Much valuable information regarding the existence of non-notifiable infectious disease has reached the Health Office through the agency of Head Teachers and School Attendance Officers.

Convalescents from infectious disease and contacts who have been excluded from school are not readmitted until the Head Teacher receives a clearance certificate issued by the Health Department or the private practitioner in attendance. Children convalescent from infectious disease are excluded from school for varying periods following discharge from hospital, or, in the case of children who have been nursed at home, following disinfection of the home.

The period of exclusion of contacts depends upon the type of infectious disease.

Water at the Schools is drawn from the Corporation mains and is satisfactory as regards quantity and quality.

A sanitary survey of each school is made three times each year by the Assistant School Medical Officer, who reports thereon to the School Medical Officer who is also Medical Officer of Health. Any sanitary defects found are reported to the Education Authority, who take such action as may be necessary.

Absences from school due to sickness are reported to the School Medical Department through the School Attendance Officers.

A full survey of the health of the school-child is contained in the Annual Report on the work of the School Medical Service.

THE TESTING OF DRAINS.

No. of Smoke Tests	70
No. of Water Tests	56
No. of Colour Tests	50
Breaking Down	23
Inspections made while work was in progress	558
Total number of Defects found	333
No. of Informal Notices Served	263
No. of Formal Notices Served	31
No. of Defects Completed	315
No. of Defects outstanding at end of 1934	18

THE RAG FLOCK ACTS, 1911 & 1928.

There is one premises in Blackburn where rag-flock is used. The flock is not manufactured locally, but is purchased under guarantee of Government Standard of Cleanliness.

The premises concerned have been visited in the course of routine district inspections.

DISPOSAL OF THE DEAD.

The arrangements for the disposal of the dead will remain adequate for at least a further ten years.

PART III.

Food Supply.

REPORT OF THE VETERINARY INSPECTOR

(Mr. E. J. Burndred, M.R.C.V.S., D.V.H.).

Farm and Dairy Cattle Inspection.

During the year 210 visits were paid to farms ; 365 cowsheds were inspected, and the mammary glands of 4,438 cows examined.

One cow, on a farm in the Borough, was found to be affected with tuberculosis of the udder. It was slaughtered, and on post mortem examination, was classed as advanced tuberculosis.

Three cases of Tuberculosis with cough in three cows were reported by the owners, and confirmed on clinical examination.

The three cows were slaughtered, and on post mortem examination the disease was found to be advanced.

None of these cases were affected in the udders, but if they had remained undealt with, udder lesions would probably have developed at a later stage, causing infection of the milk.

Four cases of tuberculous emaciation in cows were discovered. The animals were slaughtered, and the disease was found to be advanced.

Eleven cows were found to be affected with mastitis in one or more quarters of the udder, and in these cases the milk was not used for human consumption during the affection.

Dairies, Cowsheds and Milkshops.

Regular visits were paid to all producing and retailing premises in Blackburn, and many visits were paid in conjunction with, and by the courtesy of, the local officials, to milk-producing premises outside the Borough which supply milk for consumption in Blackburn.

There is a distinct improvement taking place at the majority of premises, but even to-day we have producers who are not fit to produce milk for human consumption.

CLEAN MILK COMPETITION.

There are four classes of competitors for the Clean Milk Awards.

A cup is awarded in each class, and this is held by the winner for one year. He also receives a miniature cup and gold medal, which he retains.

Class I. is open to producers of raw, designated milks, purveyed in Blackburn. The award in this class is the " Redmayne " Cup.

The winner for 1934 was A. Ormerod, Higher Oozebooth Farm, Blackburn.

Class II. is open to producers of non-designated milks, purveyed in Blackburn. The award in this class is the " Porritt " Cup.

The winner for 1934 was A. Threlkeld, Hatchwood Farm, Hoghton.

Class III. is open to producers of designated milks whose main source of livelihood is dairy farming, and is awarded for the best farm, the award being the " Burke " Cup.

The winner for 1934 was W. Harrison, Home Farm, Dutton.

Class IV. is for the best undesignated dairy farm, under the same conditions as Class *III.*

The winner for 1934 was J. Eddlestone, Manor Farm, Samlesbury.

Mr. Arthur Holgate, of Moreton Hall, Whalley, was the Judge in Classes III. and IV., and he was particular to see that the conditions were conducive to the production of a pure clean milk.

MILK (SPECIAL DESIGNATIONS) ORDER, 1923.

Certified Milk. There are three farms holding the certificate of the Ministry of Health which supply certified milk in Blackburn. Two are situated some distance away, consequently the milk is not delivered the same day as produced. The prices are 7½d. and 6d. per pint. The other farm, which was previously Grade A, is situated a few miles from Blackburn, and the price is 4d. per pint.

Grade A (Tuberculin tested) Milk is used at the Corporation Hospitals.

Grade A Milk.—There are 12 farms in the district where Grade A milk is produced ; three of these are in the Borough, and nine in the County Area. There are also 15 retailers of Grade A Milk.

The price is usually ½d. per pint more than ordinary milk.

Pasteurised Milk.—Two dairies in the Borough are licensed for the pasteurisation of milk ; and the local Co-operative Society obtains pasteurised milk from a joint dairy situated a few miles from Blackburn. Other dairies obtain supplies from licensed establishments outside Blackburn.

Sterilised Milk, which is not a designated milk, comes into Blackburn from a number of factories outside.

BACTERIOLOGICAL EXAMINATION OF MILK.

(*a*) *B. Coli.*

One hundred and forty-three samples were submitted to the Bacteriologist, Public Health Laboratories, Liverpool. The following is a summary of his findings :—

Bacillus Coli Content :—

Not found in 1 cubic centimetre	65
Found in 1 c.c. only	34
,, 0·1 c.c.	21
,, 0·01 c.c.	11
,, 0·001 c.c.	5
,, 0·0001 c.c.	1
,, 0 00001 c.c.	6

The presence of bacillus coli, or a member of its group, is evidence of manurial contamination of the milk.

The above results show 45·4% clean ; 38·46% with slight contamination ; and 16·14% grossly contaminated.

The appended Table gives particulars of B. Coli counts month by month.

It will be seen that the heaviest contamination takes place in June and September, when the cows are out at grass.

TABLE 19.

1934	Not Present in 1-C.C.	Present in 1-C.C.	Present in 1/10 C.C.	Present in 1/100 C.C.	Present in 1/1,000 C.C.	Present in 1/10,000 C.C.	Present in 1/100,000 C.C.
January ..	..	..	..	..	..	..	..
February ..	..	1	..	..	..	..	..
March ..	22	8	3	3	..	..	..
April ..	..	..	..	..	..	..	..
May .	..	..	..	..	..	..	..
June .	16	5	5	1	..	1	6
July ..	..	..	..	..	..	..	..
August .	..	..	..	..	..	..	..
September ..	8	7	5	3	5	..	..
October .	4	2	1	..	..	..	..
November ..	..	..	..	..	..	..	..
December ..	15	11	7	4	..	..	..
TOTAL ..	65	34	21	11	5	1	6

Tubercle Bacilli.—One hundred and forty-four samples of milk were taken and examined for the presence of tubercle bacilli. The samples were made up as follows :—

One hundred and forty-three mixed samples were taken in the course of delivery ; one sample was taken direct from the quarter of a cow's udder which was suspected of being affected with tuberculosis.

Of the 143 mixed samples taken, three contained tubercle bacilli ; 128 were negative ; and in 12 cases the experimental animal died before a definite diagnosis could be made.

The special sample was positive, and the cow from which the sample was taken, being on a farm in the Borough, was slaughtered and destroyed.

The three mixed samples which contained tubercle bacilli were from three farms in the County Area.

The cows at these farms were examined in my presence by a veterinary surgeon, with the result that three cows were slaughtered. Two carcases were destroyed, but in the third case the disease was localised and the carcase passed.

Mixed samples of milk supplied to the Royal Infirmary and the Corporation Hospitals were taken periodically and examined for the presence of tubercle and on each occasion were found to be negative.

EXAMINATION OF MILK FOR DIRT.

Samples examined for dirt were submitted to filtration through cotton wool discs.

The slightest departure from absolute cleanliness as viewed with the naked eye classifies the sample as fairly clean, and, according to the amount of actual extraneous material, others are classified as contaminated, grossly contaminated and very grossly contaminated.

Letters are sent to purveyors of contaminated milk ; in the Borough visits are made to the farms, and, as far as possible, in the County Area, arrangements are made for co-operation with the local officials.

During the year 672 samples of milk were taken and examined for the presence of dirt. One hundred and seven of these samples were taken from producer retailers whose premises are within the Borough, and were classified as follows :—

Clean	18	or	16·82%
Fairly Clean	69	or	64·44%
Contaminated	17	or	15·88%
Grossly Contaminated	2	or	1·86%
Very Grossly Contaminated	1	or	0·93%

Three hundred and ninety-seven samples were taken from producer retailers whose premises are outside the Borough :—

Clean	107	or	26·95%
Fairly Clean	221	or	55·66%
Contaminated	52	or	13·1%
Grossly Contaminated	11	or	2·77%
Very Grossly Contaminated	6	or	1·51%

Forty-six samples were taken from retailers who reside in the Borough, but who procure their supplies from producers whose premises are, for the most part, outside the Borough :—

Clean	3 or	6·52%
Fairly Clean	28 or	60·87%
Contaminated	14 or	30·43%
Grossly Contaminated	—	——
Very Grossly Contaminated	1 or	2·17%

Twelve samples were taken from retailers whose premises are outside the Borough :—

Clean	4 or	33·3%
Fairly Clean	8 or	66·6%

One hundred and ten samples were taken from wholesale producers at the dairies supplied by them before the milk was handed over :—

Clean	— or	0%
Fairly Clean	52 or	47·27%
Contaminated	53 or	48·18%
Grossly Contaminated	5 or	4·54%

Where visits can be made to farms with the officials of the districts concerned the effect is much better than if letters are sent alone.

CHEMICAL ANALYSIS OF MILK.

Two hundred and eight samples of milk, 174 of which were informal, were taken during the year and examined at the Public Health Laboratory, Liverpool. Five samples, or 2·40%, were reported not to conform with the standard prescribed by the Ministry of Agriculture. If an informal sample proves to be not genuine on analysis, a formal sample is purchased and submitted to the analyst.

Two formal samples presented marked deficiency, and warning letters were sent to the vendors.

TABLE 20.

AVERAGE COMPOSITION OF MILK SOLD IN BLACKBURN. YEAR 1934.

MONTH	No. of Samples Taken.	% of Fat	% of other Solids.
January	66	3·81	8·56
February	18	3·74	8·97
March	..	..	..
April	..	..	..
May	38	3·90	8·75
June	3	3·87	9·44
July	38	3·63	9·16
August	2	3·90	9·30
September	..	..	..
October	37	4·12	8·65
November	6	3·87	9·18
December	..	..	..
Average	208	3·85	9·09

PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

No action was necessary with regard to tuberculous employees in the Milk Trade.

THE PUBLIC HEALTH (CONDENSED MILK) REGULATIONS, 1923 & 1927.

Eight samples were purchased under the above regulations, and all were found, on analysis, to be genuine. All were properly labelled.

These samples are included in Table 29, Food and Drugs (Adulteration) Act.

THE ARTIFICIAL CREAM ACT, 1929.

No action has been taken under the above Act.

THE PUBLIC HEALTH (DRIED MILK) REGULATIONS, 1923 & 1927.

No action has been taken under the above Regulations.

Section 80 Blackburn Corporation Act, 1922.

Food Preparing Premises.

This Section reads as follows :—

> " Any premises ordinarily used, or proposed to be ordinarily used, for the preparation or manufacture of sausages, pressed, potted or preserved meat, fish or other food, intended for the purposes of sale, shall be registered by the owner or occupier thereof with the Corporation from time to time in such manner as they may direct, and no premises shall be used for the purposes aforesaid unless the same are so registered, and the Corporation shall have power to refuse registration of any premises where the conditions are unsuitable."

There are 46 premises registered under the above section, and in addition there are a large number of food preparing premises which are exempt from registration.

Two hundred and thirty-two visits were made to such premises. Generally they were found to comply with requirements.

In certain cases, the necessity for repairs was pointed out, and in other cases suggestions for improvements were made and in all cases improvements were effected.

DISEASES OF ANIMALS ACTS AND ORDERS.

Foot and Mouth Disease. No outbreaks occurred in Blackburn, but, for a period, the area was within 15 miles of an outbreak, and the usual restrictions of movement of animals were imposed.

There were 79 outbreaks in Great Britain, necessitating the slaughter of 10,245 animals, which had been exposed to infection.

The figures for the preceding five years were :—

1933 ... 87 outbreaks, with 7806 animals slaughtered.
1932 ... 25 outbreaks with 2659 animals slaughtered
1931 ... 97 outbreaks with 10257 animals slaughtered.
1930 ... 8 outbreaks, with 306 animals slaughtered.
1929 ... 38 outbreaks, with 3570 animals slaughtered.

Anthrax. There were no cases in Blackburn. There were 397 outbreaks in Great Britain, affecting 453 animals.

Routine microscopical examination of blood smears from carcases of animals arriving at the Abattoirs and Railway Siding in a dead or dying condition, is done as a routine.

Glanders. No cases of this disease have been discovered since 1928.

Sheep Scab. No cases occurred in Blackburn, but the position has been one of great anxiety, and as a result of the disease position in Lancashire, Westmorland, Durham and Yorkshire, a special Sheep Scab Pennine Range Order was issued.

Special Regulations are in force in Blackburn to prevent the spread of the disease.

There were 686 outbreaks in Great Britain.

Parasitic Mange. No cases occurred in Blackburn ; 115 outbreaks were reported in Great Britain, involving 187 animals.

Swine Fever. It would appear that unrestricted movement of pigs in Lancashire is impossible if this disease is to be kept under control. Towards the end of 1933 the disease position was so serious that Lancashire was declared a Swine Fever Infected Area, and the restrictions imposed were not removed until the middle of 1934. During that time store pigs could not be exposed in a market, and, as a result, the disease died down. Following free movement for the remainder of the year, the disease again gained ascendency, and a new Lancashire Swine Fever Infected Area Order came in force on January 1st, 1935.

There were reports of seven suspected outbreaks in Blackburn, and these were investigated by Ministry of Agriculture Officials.

One thousand eight hundred and thirty-two outbreaks were confirmed in Great Britain.

Tuberculosis. One case of tuberculosis of the udder, three cases of tuberculosis with cough, and four cases of tuberculous emaciation were dealt with under the Tuberculosis Order, 1925. They were all classed on post mortem examination as cases of advanced tuberculosis.

Cattle Market. The approximate number of animals exposed for sale was :—

TABLE 21.

Year.	*Cattle.*	*Sheep.*	*Calves.*	*Pigs.*	*Horses*	*Asses.*
1934	3407	2375	1478	327	7	...
1933	3553	2975	1276	512	9	...
1932	4541	5558	1721	781	34	...
1931	4885	6260	2183	1244	11	...
1930	6965	8869	2037	573	17	...
1929	6947	9552	2291	966	19	...
1928	6432	5655	2041	1045	19	...
1927	9960	9922	2675	1333	...	21
1926	8092	7410	2285	930	20	...
1925	7171	6962	2346	486	23	...
1924	5609	5608	3493	620	24	...
1923	7716	10026	3040	721	35	...

MEAT INSPECTION.

It would appear from the number of animals slaughtered at the Public Abattoir that we have passed through the trough of depression, and spending power is increasing. The lowest number of animals slaughtered was in 1931, when 74,819 animals were slaughtered, and each year since then there has been an increase.

In 1934, 86,823 animals were slaughtered, and that was 2,081 more than in 1933, and 12,004 more than in 1931.

Another significant change, probably due in the first place to reduced spending power, is that more bulls are now being slaughtered, and less bullocks and heifers.

Mention was made in the Annual Report for 1933 of the coming into force of the Slaughter of Animals Act, 1933. That Act made it compulsory for all food animals, except sheep, to be stunned before being slaughtered. It also contained a clause giving a Local Authority power to include sheep. Blackburn exercised this option, and now all animals slaughtered in Blackburn are humanely stunned before they receive the final despatch.

The number of susceptible animals (cattle, calves, pigs) affected with tuberculosis during 1934 was 700, or 4·1% of those slaughtered.

Corresponding percentages were :—in 1933, 3·1 ; 1932, 3·35 ; 1931, 3·43 ; 1930, 2·38 ; 1929, 2·22 ; 1928, 2·9 ; 1927, 2·079 ; 1926, 2·15; 1925, 1·83 ; 1924, 1·87.

Of 1,119 cows slaughtered, 209, or 18·6%, were found to be affected with tuberculosis in some degree.

Of 234 heifers, only 8, or 3·4%, were affected.

Of 2,014 bulls, 62, or 3·07%, were affected.

Of 4,939 bullocks, 28, or 0·5%, were affected.

Out of 1,735 calves slaughtered, none were found affected.

All these percentages are lower than in 1933, the increase in the general percentage being due to a large increase in the number of pigs found affected.

Of 7,008 pigs slaughtered, 393, or 5·6%, were affected. The percentage in 1933 was 2·5.

The explanation of this great increase would be both interesting and instructive. It has been well known for many years that many farmers would not bring pigs to Blackburn because they considered that the inspection was too strict. It may be that with the coming of the Pig Marketing Scheme, with its compensation fund, we have received many pigs which otherwise would have gone elsewhere.

In 1935, with no compensation fund available, there will again be discrimination used by the farmers, and we may then only receive pigs for slaughter which show a much lower percentage of tuberculosis.

The number of carcases in which the disease was so advanced as to necessitate total condemnation was 89, compared with 80 in 1933 ; 84 in 1932 ; 90 in 1931 ; 68 in 1930 ; 84 in 1929 ; 111 in 1928 ; 107 in 1927 ; 107 in 1926 ; 69 in 1925 ; 85 in 1924.

In 1934, 62 carcases of cattle were totally condemned as being unfit for human food, and of these, 56 were affected with tuberculosis.

Fluke disease showed a great improvement on the last few years.

The number of livers condemned owing to this disease was 6,195, compared with 7,741 in 1933 ; 9,019 in 1932 ; 6,579 in 1931 ; 5,247 in 1930 ; 6,249 in 1929 ; 6,042 in 1928 ; 3,836 in 1927.

During the year regular visits were made to the one private slaughterhouse in the Borough ; to butchers' and other meat shops ; to food preparing premises : to the wholesale and retail fish markets ; and to the meat market.

Tuberculosis in Poultry. The majority of fowl killed and dressed for human food are not submitted for inspection before being placed on the Market. The Inspector whose duty it is to supervise the Markets is constantly finding carcases which, on inspection, show lesions of tuberculosis.

Enquiries go to prove that tuberculosis is on the increase in poultry, so that greater supervision will become more and more necessary.

TABLE 22.

NUMBER OF ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIR.

1934.	Beasts	Sheep	Calves	Pigs	Goats	Total
January	658	5375	123	593	..	6749
February	686	5172	124	601	..	6583
March	779	6111	237	680	..	7807
April	642	5140	114	463	..	6359
May	775	6647	79	382	..	7883
June ..	577	5753	66	235	..	6631
July	462	5156	67	165	..	5850
August	771	7538	119	344	..	8772
September	586	5407	161	457	..	6611
October	910	7067	290	897	..	9164
November	786	5421	215	758	..	7180
December	674	4987	140	1433	..	7234
TOTAL	8306	69774	1735	7008	..	86823

NUMBER OF CARCASES AND PORTIONS OF CARCASES BROUGHT TO THE ABATTOIR.

TABLE 23.

1934.	CARCASES.			BEEF		
	Beef	Mutton	Pork	Fore Qrs.	Hind Qrs.	Buttocks
January	...	20	...	25	25	...
February .. .	...	23	13	27	27	...
March	...	...	...	33	33	...
April	...	...	10	35	29	...
May	...	30	...	35	35	...
June	...	20	9	30	30	...
July	...	24	4	19	19	...
August	...	25	6	32	32	...
September	...	24	8	24	24	...
October..	...	30	4	32	32	...
November	...	24	17	22	22	...
December	...	25	30	20	21	...
TOTALS .	...	245	101	334	329	...

1934.	CASES OF			Lengths of Pork	Legs of Pork	Tins of Meat
	Kidneys	Pork	Liver			
January	8	...	...	45	...	...
February .. .	...	...	...	42	...	...
March	10	...	...	42	...	...
April	8	...	...	13	...	...
May	10	...	...	...	...	...
June	8	...	...	...	...	...
July	...	...	...	...	...	...
August	10	...	...	...	...	...
September ..	...	...	...	6	...	...
October	10	...	...	60	...	...
November .. .	8	...	...	54	...	...
December .. .	8	...	...	97	20	...
TOTALS .	80	...	...	359	20	...

TABLE 24.

ORGANS AND PARTS OF CARCASES EXAMINED, REJECTED AND DESTROYED, FOR DISEASES OTHER THAN TUBERCULOSIS.

Disease or Condition	Diaphragm	Tongues	Heads	Lungs	Hearts	Livers	Stomachs	Udders	Intestines	Kidneys	Tails	Lbs. of Meat
Fluke	..	...	...	...	...	6195	...	...	...	...	...	..
Cirrhosis	...	...	...	...	...	242	...	...	...	...	...	..
Angioma	...	...	...	...	...	51	...	...	...	...	...	...
Unsound	...	...	26	36	...	5	4	...	16	...	...	1298
Abscesses	...	...	2	...	...	13	19	...	...	...	...	...
Actinomycosis .	...	...	3	...	...	...	...	...	...	...	...	...
Mammitis .. .	...	...	...	...	..	...	...	162	...	...	...	..
Parasitic .. .	...	...	...	144	...	187	...	...	4	38	...	..
Nephritis .. .	...	...	...	...	...	...	...	...	...	22	...	..
Bruised .. .	...	...	...	...	...	...	...	...	...	...	...	1763
Congested .. .	...	...	...	...	...	...	...	...	...	...	...	...
Pericarditis .	...	...	...	...	30	...	...	...	...	...	...	...
Pneumonia ..	...	...	...	14	...	...	...	...	...	...	...	..
Melanosis	...	...	...	...	...	...	...	...	...	...	...	...
Endocarditis ..	...	...	...	...	...	...	...	...	...	...	...	...
Fatty Degen'n...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL	—	—	31	194	30	6693	23	162	20	60	—	3061

TABLE 25.

DISEASED CARCASES EXAMINED, REJECTED AND DESTROYED FOR DISEASES, ETC., OTHER THAN TUBERCULOSIS.

CARCASES.

BEEF.		MUTTON.		VEAL.		PORK.		FOWL.		VENISON.	
DISEASE.	No	DISEASE.	No	DISEASE.	No	DISEASE.	No	DISEASE.	No	DISEASE.	No
Septic Mammitis.	1	Œdematous	54	Immature	54	Swine Fever	5				
Extensively Bruised	1	Parasitic Disease	21	Septicæmia	32	Swine Erysipelas	1				
Staggers	1	Congested	53	Joint Ill	12	Pneumonia	8				
Septicæmia	2	Pneumonia	2	Congested	2	Peritonitis	4				
Congested	1	Asphyxia	2	Jaundice	1	Rachitis	4				
		Pyæmia	4	White Scour	1	Septicæmia	6				
		Emaciated	6	Pyæmia	1	Emaciated	1				
		Extensively Bruised	3	Nephritis	2	Jaundice	1				
		Peritonitis	1			Pyæmia	2				
						Œdematous	1				
	6		146		105		33				

TABLE 26.

TUBERCULOUS CARCASES EXAMINED AND REJECTED.

1934	Cows		Heifers		Bulls		Bullocks		Calves		Sheep		Pigs		Fowl	Totals	
	Examined	Rejected	Examined	Rejected	Examined	Rejected	Examined	Rejected	Examined	Rejected	Examined	Rejected	Examined	Rejected	Rejected	Examined	Rejected
January	22	4	1	1	2	...	2	...	...	...	...	...	20	3	...	47	8
February	19	3	...	...	4	2	...	...	...	...	...	...	15	1	...	38	6
March	13	1	1	1	4	...	3	1	...	...	...	...	27	...	...	48	3
April	18	1	1	...	5	1	4	1	...	..	...	...	28	2	...	56	5
May	16	4	...	...	6	...	4	...	...	...	...	...	32	4	...	58	8
June	10	4	1	...	7	3	1	...	...	...	...	...	28	1	...	47	8
July	14	3	1	...	5	...	...	...	...	...	...	...	25	2	...	45	5
August .. .	23	4	...	...	10	...	...	...	...	...	...	...	28	6	...	61	10
September ..	19	4	1	...	7	1	3	...	...	...	...	...	28	1	...	58	6
October	24	5	2	...	4	...	2	...	...	...	...	...	66	9	...	98	14
November ..	14	2	...	...	5	1	8	3	...	...	...	...	45	3	...	72	9
December ..	17	5	...	...	3	1	1	...	...	...	...	...	51	1	...	72	7
TOTALS ..	209	40	8	2	62	9	28	5	...	...	...	...	393	33	...	700	89

TABLE 27.

TUBERCULOSIS IN THE ANIMALS SLAUGHTERED.

Kind of Animal.	Number Slaughtered.	Of which were Tuberculous.	Totally Rejected	Extent of the Tubercular Process in Partially Rejected Carcases.														
					Thorax.			Abdomen.										
				Heads	Lungs	Heart and Pericardium	Serous Membranes	Livers	Stemachs	Spleens	Kidneys	Intestines	Uteri	Serous Membranes	Bones	Testicles	Udders	Parts of Carcases in lbs.
Cows	1119	209	40	94	159	14	30	1	3	—	—	—	—	1	—	—	1	3846
Heifers	234	8	2	2	5	2	2	—	—	—	—	—	—	—	—	—	—	270
Bulls	2014	62	9	45	41	—	2	—	—	—	—	—	—	—	—	—	—	150
Bullocks	4939	28	5	20	19	—	1	—	—	—	—	—	—	—	—	—	—	460
Calves	1735	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pigs	7008	393	33	322	222	—	—	129	—	—	—	84	—	—	27	—	—	—
Totals	17049	700	89	483	446	16	35	130	3	—	—	84	—	1	27	—	1	4726

TABLE 28.

FISH, RABBITS, ETC., EXAMINED, REJECTED AND DESTROYED.

Fish																					
Qts. of Shrimps	Tins	Bags	Boxes	Lbs.	Rabbits	Tins of Meat	Boxes of Pears	Crates of Lettuce	Nets Brussels Sprouts	Baskets of Gooseberries	Baskets of Cherries	Chips of Raspberries	Trays of Grapes	Chips of Loganberries	Chips of Peaches	Tins of Tongue	Tins of Fruit	Tins of Cream	Tins of Meat Paste	Tins of Vegetables	Ducks
2	6	5½	151	311	814	18	9	40	16	12	2	144	6	55	12	1	39	1	9	5	5

NUMBER OF VISITS TO INSPECT FOOD.

Fish Shops	856
Provision Shops	1067
Butchers' Shops	1932
Private Slaughterhouses	39
Meat Market	168
Fish Market	257
Railway Station	287
	4606

CARCASES, ETC., SENT FOR UTILIZATION.

	Tons.	*Cwts.*	*Qrs.*
January	7	11	1
February	7	11	0
March	6	13	0
April	4	14	0
May	5	9	1
June	5	11	0
July	4	14	0
August	6	2	0
September	4	12	1
October	8	14	1
November	6	18	0
December	5	16	1
TOTAL	74	6	1

E. J. BURNDRED,

Veterinary and Chief Meat Inspector.

ICE CREAM.

There are 135 ice-cream preparing premises in Blackburn, to which 485 visits were paid during the year. Cleansing and whitewashing has been carried out at 102 of the premises, and in 26 instances the existing sanitary conditions were otherwise improved upon.

THE FOOD AND DRUGS (ADULTERATION) ACT, 1928.

The Public Analyst is Professor W. H. Roberts, M.Sc., F.I.C. Samples taken under the above Acts are submitted to him for examination at the Public Health Laboratory, Liverpool.

The number of samples examined during 1934 was 310. Nine, or 2·90%, of the total proved, on examination, to be adulterated, or not up to standard.

TABLE 29.

THE FOOD AND DRUGS (ADULTERATION) ACT, 1928.

	Samples Taken.		Samples Genuine.		Samples Adulterated.	
	Formal.	Inform'l	Formal.	Inform'l	Formal.	Inform'l
Milk	34	174	32	171	2	3
Butter	–	7	–	7	–	–
Margarine	–	2	–	2	–	–
Tea	–	3	–	3	–	–
Coffee	–	1	–	1	–	–
Cocoa	–	4	–	4	–	–
Cheese	–	3	–	3	–	–
Barley	–	1	–	1	–	–
Rice	–	1	–	1	–	–
Jam	–	1	–	1	–	–
Baking Powder	–	3	–	3	–	–
Custard Powder	–	2	–	2	–	–
Egg Substitute Powder	–	2	–	2	–	–
Condensed Milk	–	8	–	8	–	–
Tinned Fruit Salad	–	2	–	2	–	–
,, Pineapple	–	2	–	1	–	1
,, Peaches	–	2	–	2		–
,, Pears	–	1	–	1	–	–
Self-Raising Flour	–	1	–	1	–	–
Cod Liver Oil	–	1	–	1	–	–
Ice Cream	–	10	–	10	–	–
Vinegar	–	2	–	2	–	–
Camphorated Oil	–	1	–	1	–	–
Olive Oil	·	1	–	1	–	–
Lemon Curd	–	1	–	1	–	–
Tinned Crab	–	1	–	1	–	–
Epsoms Salts	–	1	–	1	–	–
Yeast	–	1	–	1		–
Tinned Cream	–	2	–	2	–	–
,, Salmon	–	1	–	1	–	–
Sausage	–	1	–	1	–	–
Tinned Grape Fruit	–	1	–	1	–	–
,, Lobster	–	1	–	1	–	–
Seidlitz Powder	–	1	–	1	–	–
Tinned Peas	–	2	–	2	–	–
,, Soup	–	1	–	1	–	–
Chicken, Ham & Tongue Paste	–	1	–	1	–	–
Beef Suet with Flour	–	1	–	1	–	–
Jelly	–	5	–	5	–	–
Dried Apricots	–	1	–	1	–	–
Ginger Wine	–	1	–	1	–	–
Ground Almonds	–	1	–	1	–	–
Shredded Beef Suet	–	1	–	1	–	–
Sugar	–	2	–	2	–	–
Beer	–	1	–	1	–	–
Bacon	–	1	–	1	–	–
Dried Mint	1	1	–	–	1	1
Grape Fruit Juice	–	1	–	1	–	–
Grape Fruit Squash	–	1	–	1	–	–
Ham	–	1	–	1	–	–
Allenbury's Food	–	2	–	2	–	–
Corned Beef	–	1	–	1	–	–
Mustard Compound	–	1	–	1	–	–
Potted Meat	–	1	–	1	–	–
Sago	–	1	–	–	–	1
Tapioca	–	1	–	1	–	–
Totals	35	275	32	269	3	6

TABLE 30.

THE FOOD AND DRUGS (ADULTERATION) ACT, 1928.—ACTION TAKEN IN REGARD TO ADULTERATED SAMPLES.

Articles Purchased.	Number Analysed	Number Genuine	Number Adul'rated	Number of Sample	Formal	Informal	Amount of Adulteration.	Action Taken.
Milk	208	203	5	152	...	Yes	Slightly watered	Formal samples taken and found genuine.
	...	...	...	180	Yes	...	Ditto	Warning Letter from M.O.H.
	...	...	...	224	Yes	...	8% Deficient in Milk Fat	Further samples taken and found genuine.
	...	...	...	251	...	Yes	20% Ditto	Ditto Ditto.
	...	...	...	266	...	Yes	6% Ditto	Ditto Ditto.
Tinned Pine-apple ...	2	1	1	407	...	Yes	285 parts of tin per million	Consignment withdrawn.
Dried Mint...	2	...	2	335	...	Yes	75% of dried ailanthus leaves...	Formal sample taken.
	...	...	...	336	Yes	...	25% Ditto	Case withdrawn on payment of costs on vendor undertaking to withdraw the consignment.
Sago	1	...	1	415	...	Yes	This sample consisted of tapioca	Warning letter from M.O.H.

TABLE 31.

The Public Health (Preservative, &c. in Food) Regulations, 1925 & 1927.

Description of Sample.	No. of Samples Examined	No. of Samples Free	No. Containing Preservative	Where examination of preservative has been made and none found the fact is indicated by a x. All results are expressed in parts per million.							
				Sulphur Dioxide	Benzoic Acid	Borates	Salicylic Acid	H'drogen Peroxide	Formaldehyde	Fluorides	Sodium Nitrite
Milk	208	208	—	—	—	x	—	—	x	—	—
Tinned Cream	2	2	—	—	—	x	—	x	x	—	—
Butter...	7	7	—	—	—	x	—	—	—	x	—
Margarine	2	2	—	—	—	x	—	—	—	x	—
Jam	1	—	1	20	x	x	x	—	—	—	—
Condensed Milk	8	8	—	—	—	x	—	—	—	—	—
Custard Powder	2	2	—	x	—	—	—	—	—	—	—
Jelly	5	4	1	20	—	—	—	—	—	—	—
Dried Apricots	1	—	1	1230	—	—	—	—	—	—	—
Ginger Wine	1	—	1	x	170	x	x	—	—	—	—
Sugar	2	2	—	x	—	—	—	—	—	—	—
Beer	1	—	1	40	—	—	—	—	—	—	—
Bacon	1	—	1	x	—	x	—	—	x	—	100
Grape Fruit Juice	1	1	—	280	x	x	x	—	—	—	—
Grape Fruit Squash... ..	1	1	—	65	x	x	x	—	—	—	—
Ham	1	—	1	x	—	x	—	—	x	—	500
Ice Cream	10	10	—	x	—	x	—	—	—	—	—
Barley...	1	1	—	x	—	—	—	—	—	—	—
Chicken, Ham & Tongue Paste	1	1	—	x	—	x	—	—	—	—	—
Lemon Curd	1	1	—	x	x	x	x	—	—	—	—
Potted Meat	1	1	—	x	—	x	—	—	—	—	—
Sago	1	1	—	x	—	—	—	—	—	—	—
Sausage	1	1	—	x	—	x	—	—	—	—	—
Tapioca	1	1	—	x	—	—	—	—	—	—	—

FERTILISERS AND FEEDING STUFFS ACT, 1926.

Seven samples of feeding stuffs and fertilisers were examined by the Analyst during the year. Of these, one conformed with the statutory statement, and six failed to do so. The vendors of the samples were informed of the difference between the actual composition and the composition as defined in the statutory statement, and the deficiency or excess was pointed out, and in the case of the formal samples the Ministry of Agriculture were informed.

The appended Table gives particulars of work done under the Act :—

TABLE 32.

ARTICLE.	Formal	Informal	According to Statutory Statement	Not According to Statutory Statement	ACTION TAKEN.
Meat Meal...	2	—	—	2	Reported to Ministry of Agriculture
Meat and Bone Meal .	3	—	—	3	Ditto
Laying Meal	—	1	1	—	
Lawn Manure	—	1	—	1	Letter sent.

MERCHANDISE MARKS ACT, 1926.

Every endeavour has been made to give publicity to the provisions of the above Act.

One thousand one hundred and seven visits were made to premises, and personal warnings given by the Inspector in 25 instances.

PART IV.

Prevalence of,
and
Control over,
Infectious Disease.

TABLE 33.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1934.

NOTIFIABLE DISEASE.	Cases notified in whole District.														Total cases notified in each Locality.														Total cases removed to Corporation Hospital	Total Deaths in the Borough
	At all Ages	At Ages—Years.																												
		Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	St. Stephen's	Trinity	St. Michael's	St. John's	St. Silas'	St. Paul's	St. Peter's	St. Mary's	St. Matthew's	St. Thomas'	Park	St. Luke's	St. Mark's	St. Andrew's		
Small-pox...	22	1	–	–	–	1	2	–	2	6	3	1	6	–	3	–	–	–	–	–	–	–	–	3	5	1	7	3	22	4
Cholera	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diphtheria (including Membranous Croup) ...	90	–	2	6	6	12	31	13	6	9	4	–	1	–	5	2	2	2	8	7	5	10	5	4	28	6	5	1	86	4
Erysipelas...	54	–	–	–	–	–	3	–	1	11	10	8	10	11	2	7	4	3	4	6	2	1	1	8	7	–	2	7	11	4
Scarlet Fever	665	2	11	32	49	45	261	139	31	71	10	9	4	1	72	35	32	14	113	66	31	22	37	44	81	31	52	35	404	5
Typhus Fever	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Enteric Fever	3	–	–	–	–	–	1	–	–	1	–	1	–	–	1	1	–	–	–	1	–	–	–	–	–	–	–	–	3	–
Puerperal Fever	8	–	–	–	–	–	–	–	–	6	2	–	–	–	–	–	–	–	–	1	1	1	–	2	1	1	–	1	1	2
Puerperal Pyrexia	13	–	–	–	–	–	–	–	2	10	1	–	–	–	–	–	1	3	–	–	–	2	1	1	2	2	–	1	–	–
Cerebro-spinal Meningitis ...	2	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–		–
Ophthalmia Neonatorum ...	8	8	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	1	–	–	1	1	2	1	–	–	–	1	2	–
Pulmonary Tuberculosis M	55	–	–	–	–	–	1	–	3	22	9	16	4	–	10	3	4	3	1	6	2	2	5	7	4	1	4	3	22	42
F	34	–	–	–	–	–	–	1	8	16	8	–	1	–	4	4	3	–	–	–	3	1	2	2	3	3	3	6	20	25
Other forms of Tuberculosis M	13	2	1	1	–	–	4	2	–	1	–	–	2	–	–	–	1	–	–	1	1	3	1	2	2	1	–	1	–	8
F	8	–	–	–	–	–	–	1	2	5	–	–	–	–	–	–	–	–	1	–	–	2	1	–	1	–	–	3	–	3
Poliomyelitis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Encephalitis Lethargica ...	4	–	–	1	–	–	–	–	–	2	–	1	–	–	–	–	–	1	–	1	–	–	–	–	1		–	1	–	4
Dysentery...	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Malaria	1	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Pneumonia	163	2	2	2	8	2	19	12	8	29	31	14	19	15	15	7	13	10	12	10	4	9	12	12	17	14	15	13	–	118
*Diarrhœa	1	1	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	8
†Chicken-Pox	280	8	20	22	29	31	152	15	3	–	–	–	–	–	33	5	9	3	16	32	10	5	18	56	36	14	20	23	7	–
TOTALS	1424	24	36	64	92	91	474	183	66	192	78	50	47	27	147	64	69	40	155	131	60	59	85	143	190	74	108	99	578	227

* Notifiable from July 1st to October 31st only.

† Notifiablo from February 14th to May 16th only.

TABLE 34.

INFECTIOUS DISEASES. AGE INCIDENCE OF CASES NOTIFIED.

	Under One Year		1—2 Years		2—3 Years		3—4 Years		4—5 Years		5—10 Years		10—15 Years		15—20 Years		20—35 Years		35—45 Years		45—65 Years		Over 65 Years		Total 1934		Totals 1931		Totals 1932		Totals 1933	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Scarlet Fever	1	1	3	8	17	15	27	22	27	18	124	137	64	75	13	18	22	49	3	7	4	9	.	1	305	360	37	44	97	135	271	278
Diphtheria	..	..	1	1	2	4	3	3	10	2	22	9	4	9	2	4	4	5	..	4	..	1	..	..	48	42	27	30	42	53	57	52
Erysipelas.............	..	..	..	..	..	..	..	..	..	..	..	3	..	..	.	1	8	3	4	6	7	11	8	3	27	27	18	18	21	21	30	28
Enteric Fever	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	1	2	2	..	3	6	1	..
Puerperal Fever	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	6		2	.	..		.	..	8		7	.	4	.	6
Puerperal Pyrexia	..	..	..	..	..	..	..	..	..	.	.	..	.	..	..	2	..	10	..	1	..	..	.	..	..	13	..	21	..	13	..	10
Ophthalmia Neonaterum	5	3	..	.	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3	6	1	6	6	5	7
Pneumonia Ac. Primary..	1	1	2	..	..	2	5	3	1	1	11	8	7	5	6	2	21	8	21	10	19	14	9	6	103	60	166	124	114	62	138	115
Tuberculosis—Lungs	..	..	..	..	..	..	..	.	..	..	1	..	..	1	3	8	22	16	9	8	20	1	.	..	55	34	88	72	66	50	55	29
do. Other Forms.	2	..	1	..	1	..	..	..	..	..	4	..	2	1	..	2	1	5	..	..	2	..	.	..	13	8	27	23	14	19	16	12
Encephalitis Lethargica..	.	.	.	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	..	.	..	1	..	..	3	1	3	3	4	6	3	2
Diarrhœa	..	1	..	..	..	..	..	.	..	..	..	..	..	..	.	.	..	..	..	.	.	..	.	..	..	1	..	3	1	2	1	..
TOTALS	9	6	7	9	21	21	35	28	38	21	163	157	77	91	24	37	80	103	37	38	52	38	17	10	560	559	374	346	368	377	577	539

TABLE 35.

Infectious Diseases.

Case Incidence per 1000 of the Population.

	St. Stephen's	Trinity	St. Michael's	St. John's	St. Silas	St. Paul's	St. Peter's	St. Mary's	St. Matthew's	St. Thomas	Park	St. Luke's	St. Mark's	St. Andrew's
Scarlet Fever	5·57	4·46	3·81	2·19	12·70	7·57	5·10	4·36	4·42	4·00	9·15	4·33	5·33	3·32
Diphtheria	0·38	0·25	0·23	0·31	0·89	0·80	0·82	1·98	0·59	0·36	3·16	0·83	0·51	0·09
Erysipelas.................	0·15	0·89	0·47	0·47	0·44	0·68	0·31	0·19	0·11	0·72	0·79	0·00	0·20	0·66
Enteric Fever	0·07	0·12	0·00	0·00	0.00	0·11	0·00	0·00	0·00	0·00	0·00	0·00	0·00	0·00
Puerperal Fever	0.00	0·00	0·00	0·00	0·00	0·11	0·16	0·19	0·00	0·18	0·11	0·13	0·00	0·09
Puerperal Pyrexia	0·00	0·00	0·11	0·46	0·00	0·00	0·00	0·39	0·11	0·09	0·22	0·27	0·00	0·09
Ophthalmia Neonatorum	0·07	0·00	0·00	0·15	0·00	0·00	0·16	0·19	0·23	0·09	0·00	0·00	0·00	0·09
Acute Primary Pneumonia ..	1·16	0·89	1·54	1·57	1·34	1·14	0·65	1·78	1·43	1·09	1·92	1·95	1·53	1·23
Tuberculosis—Lungs	1·08	0·89	0·83	0·47	0·11	0·68	0·82	0·59	0·83	0·81	0·79	0·55	0·71	0·85
do. Other Forms ..	0·00	0·00	0·11	0·00	0·11	0·11	0·16	0·99	0·23	0·18	0·33	0·13	0·00	0·37
Encephalitis Lethargica.....	0·00	0·00	0·00	0·15	0·00	0·11	0·00	0·00	0·00	0·00	0·11	0·00	0·00	0·09
Diarrhœa	0·07	0·00	0·00	0·00	0·00	0·00	0·00	0·00	0·00	0·00	0·00	0·00	0·00	0·00

TABLE 36.

SHEWING NUMBER OF CASES OF INFECTIOUS DISEASES NOTIFIED FROM 1915 TO 1934.

DISEASE.	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Smallpox	...	...	...	...	...	...	...	...	...	...	...	9	5	10	34	...	...	...	...	22
Diphtheria (including Membranous Croup)	39	52	50	57	30	69	45	52	35	62	67	81	99	124	197	133	57	95	109	90
Erysipelas	69	66	40	52	38	59	47	54	52	45	39	44	66	42	57	56	36	42	58	54
Scarlet Fever	460	153	96	150	136	181	211	231	216	70	304	218	125	121	761	342	81	232	549	665
Enteric Fever	44	14	13	13	3	5	2	5	3	3	2	9	2	1	6	7	2	9	1	3
Puerperal Fever	5	5	3	5	5	12	15	7	12	10	13	11	7	10	9	7	7	4	6	8
Puerperal Pyrexia	...	...	...	...	...	...	...	...	...	...	...	11	19	9	16	16	21	13	10	13
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis ...	...	2	...	1	2	...	...	...	...	...	...	...	...	...	...	4	...	1	2	2
Poliomyelitis	...	1	...	...	...	1	3	...	1	1	...	...	...	...	2	...	...	1	4	...
Pulmonary Tuberculosis ...	213	154	131	176	124	88	150	145	176	150	169	132	111	106	125	153	160	116	84	89
Other forms of Tuberculosis ...	88	49	47	54	47	38	71	70	102	63	71	44	40	36	30	38	50	33	28	21
Ophthalmia Neonatorum ...	19	15	7	15	18	22	24	22	15	17	25	19	19	17	13	21	7	12	12	8
*Measles	...	1081	1938	1560	103	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica ...	...	...	...	...	5	2	2	1	10	32	5	9	8	7	5	2	6	10	5	4
Dysentery	...	...	...	...	3	1	1	...	...	...	...	1	1	1	...	5	1	...	...	...
Malaria	...	...	...	...	61	18	4	2	1	1	1	1	...	...	...	...	...	2	...	1
Pneumonia	...	...	...	...	114	158	176	275	349	358	242	149	256	222	305	161	290	176	253	163
†Diarrhœa...	...	...	...	...	...	...	31	1	2	4	21	12	1	1	6	5	3	3	1	1
‡Chicken-Pox	...	. .	...	...	...	...	. .	...	...	...	...	...	...	44	257	...	...	...	...	280
TOTALS	937	1592	2325	2083	689	654	782	865	974	816	959	750	759	751	1823	950	721	749	1122	1424

* No longer notifiable.

† Notifiable from July 1st to October 31st.

‡ ,, ,, February 14th to May 16th.

TABLE 37.

NOTIFICATION OF INFECTIOUS DISEASES.

Disease	Total cases notified	Cases admitted to Hospital	Total Deaths	Incidence Rate per 1000 of Population					Death Rate per 1000 of Population					Housing Conditions														
														1934			1933			1932			1931			1930		
				1934	1933	1932	1931	1930	1934	1933	1932	1931	1930	1—3 rooms	4—5 rooms	over 5 rooms	1—3 rooms	4—5 rooms	over 5 rooms	1—3 rooms	4—5 rooms	over 5 rooms	1—3 rooms	4—5 rooms	over 5 rooms	1—3 rooms	4—5 rooms	over 5 rooms
Small Pox	22	22	4	0·18	0·00	0·00	0·00	0·00	0·03	0·00	0·00	0·00	0·00	..	15	7	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	665	404	5	5·54	4·52	1·89	0·65	2·72	0·04	0·01	0·008	0·00	0·00	11	362	292	17	377	155	10	164	58	4	46	31	10	195	137
Diphtheria	90	86	4	0·75	0·89	0·77	0·46	1·06	0·03	0·04	0·05	0·01	0·07	5	47	38	6	67	36	3	66	26	6	38	13	5	83	45
Enteric Fever	3	3	..	0·02	0·008	0·07	0·01	0·05	0·00	0·00	0·00	0·008	0·01	..	2	1	..	1	..	..	6	3	..	..	2	..	2	5
Puerperal Fever	8	1	2	0·06	0·04	0·03	0·05	0·05	0·01	0·00	0·008	0·008	0·00	..	5	*3	..	2	4	..	2	2	..	4	3	..	5	2
Puerperal Pyrexia	13	..	..	0·10	0·08	0·10	0·16	0·12	0·00	0·00	0·00	0·00	0·00	..	11	2	..	7	3	..	9	4	1	15	5	..	7	9
Pneumonia																												
Acute Primary and Acute Influenzal	163	..	118	1·36	2·08	1·44	2·34	1·28	0·98	1·12	0·72	1·12	1·14	4	111	48	5	186	62	16	117	43	11	226	53	23	118	20
Erysipelas	54	11	4	0·45	0·47	0·34	0·29	0·44	0·03	0·04	0·008	0·04	0·02	1	26	*27	..	42	16	..	26	16	4	20	12	1	36	19
Ophthalmia Neonatorum	8	2	..	0·06	0·09	0·09	0·05	0·16	0·00	0·00	0·00	0·00	0·00	1	6	1	..	9	3	1	10	1	..	6	1	2	13	6
Encephalitis Lethargica	4	..	4	0·03	0·04	0·08	0·04	0·01	0·03	0·04	0·06	0·10	0·04	..	3	1	..	3	2	..	6	4	1	4	1	..	1	1
Tuberculosis–Pulmonary																												
Males	55	22	42	0·46	0·45	0·54	0·71	0·65	0·34	0·40	0·35	0·47	0·89	2	41	12	2	40	13	5	48	13	8	69	11	2	52	29
Females	34	20	25	0·28	0·24	0·40	0·58	0·55	0·20	0·29	0·29	0·31	0·79	1	28	5	2	20	7	2	39	9	6	59	7	3	47	20
Total	89	42	67	0·74	0·69	0·94	1·29	1·20	0·55	0·69	0·64	0·78	0·84	3	69	17	4	60	20	7	87	22	14	128	18	5	99	49
Non-Pulmonary :																												
Males	13	..	8	0·10	0·13	0·11	0·22	0·16	0·06	0·02	0·05	0·08	0·17	1	11	1	..	8	5	1	9	4	2	18	7	1	10	10
Females	8	..	3	0·06	0·09	0·15	0·18	0·13	0·02	0·07	0·09	0·05	0·11	1	4	3	1	7	4	2	12	5	3	20	..	..	9	8
Total	21	..	11	0·17	0·23	0·27	0·40	0·30	0·09	0·09	0·15	0·14	0·28	2	15	4	4	15	9	3	21	9	5	38	7	1	19	18
Diarrhœa	1	..	8	0·008	0·008	0·02	0·02	0·04	0·06	0·09	0·06	0·10	0·07	..	1	..	..	1	..	..	2	1	1	2	..	1	3	1
TOTAL	1141	571	227	9·51	9·19	6·09	5·81	7·50	1·89	2·14	1·74	2·33	2·35	27	673	441	36	770	310	40	516	189	47	527	146	48	581	312

* 1 Case of Erysipelas from outside the Borough. 1 Case of Puerperal Fever from outside the Borough.

TABLE 38.

NOTIFICATION OF INFECTIOUS DISEASES.—ROOM SPACE IN RELATION TO INFECTIOUS DISEASES INCIDENCE.

Disease.	1934								1933								1932								1931								1930							
	Admitted to Hospital. No. of persons per room				Remaining at Home. No. of persons per room				Admitted to Hospital. No. of persons per room				Remaining at Home. No. of persons per room				Admitted to Hospital. No. of persons per room				Remaining at Home. No. of persons per room				Admitted to Hospital. No. of persons per room				Remaining at Home. No. of persons per room				Admitted to Hospital. No. of persons per room				Remaining at Home. No. of persons per room			
	Less than one	1—2	More than two	Total	Less than one	1—2	More than two	Total	Less than one	1—2	More than 2	Total.	Less than one	1—2	More than two	Total	Less than one	1—2	More than two	Total	Less than one	1—2	More than two	Total	Less than one	1—2	More than two	Total	Less than one	1—2	More than two	Total	Less than one	1—2	More than two	Total	Less than one	1—2	More than two	Total
Scarlet Fever	119	250	35	404	157	103	1	261	141	251	38	430	73	46	..	119	3	104	82	189	7	33	3	43	12	43	9	64	10	7	..	17	75	154	56	285	25	32	..	57
Diphtheria	16	56	14	86	2	2	..	4	23	49	27	99	6	4	.	10	2	50	39	91	2	2	..	4	13	23	14	50	6	1	..	7	16	66	43	125	5	2	1	8
Enteric Fever......	..	1	2	3	..	..	..	..	1	..	..	1	..	..	..	.	..	6	3	9	..	..	..	..	1	..	..	1	1	..	..	1	1	2	..	3	3	1	..	4
TOTAL	135	307	51	493	159	105	1	265	165	300	65	530	79	50	..	129	5	160	124	289	9	35	3	47	26	66	23	115	17	8	..	25	92	222	99	413	33	35	1	69

SMALL-POX.

Twenty-six cases of small-pox occurred during the year, of which number four terminated fatally. Three of the fatal cases occurred in unvaccinated persons, and the fourth death was that of a male, aged 62 years, vaccinated in infancy.

Of those attacked eleven were unvaccinated. Twelve cases, the youngest being 20 years old and the eldest aged 62 years, had been vaccinated in infancy. The remaining three cases had been vaccinated in infancy and were stated to have been re-vaccinated.

The first case was that of a mill-worker engaged as a stripper and grinder of Egyptian cotton, who sickened on January 26th. A few days later he developed a copious but atypical rash, and was admitted to Hospital on February 2nd, where he died the following day. In the meanwhile he had infected 21 others, and it was not until the first group of these secondary cases occurred that his condition was diagnosed as having been severe small-pox.

The disease was of high infectivity and virulence, those attacked experiencing severe onset with marked prostration, rigors, intense backache and headache, high temperature, sweating and, in several instances definite mental confusion. Seventeen of the cases were confluent in type, with high secondary temperature, and three of the fatal cases were hæmorrhagic. The picture presented by this disease in no way resembled that which is associated with variola minor, namely that of a scanty eruption with but little associated malaise.

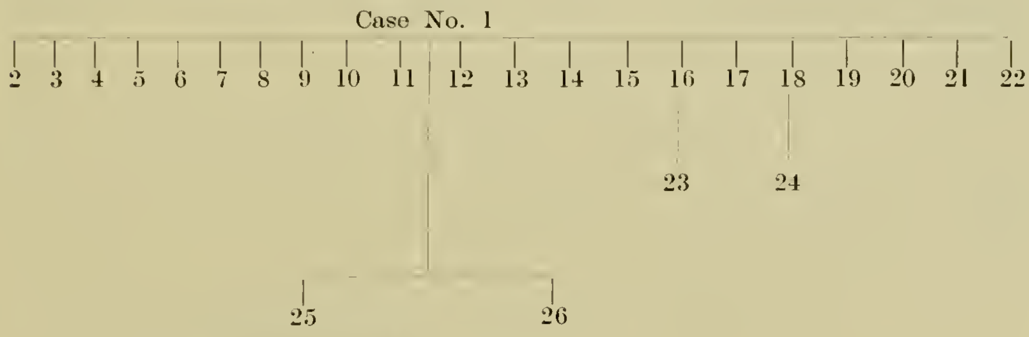
Laryngitis was a marked feature in three cases, and the majority suffered from bronchitis in varying degree. Two of the cases developed a sequence of multiple subcutaneous abscesses during convalescence.

The outbreak, which lasted for only 28 days, required extra staff to cope with the large number of contacts, whose supervision called for 6,762 visits. I take this opportunity of expressing my gratitude to Dr. Butterworth, Medical Officer of Health to the County, who placed the services of two members of his staff, namely Dr. Wray and Mr. Pickering, at the disposal of the Health Department. The services of these two gentlemen, so ungrudgingly given, were of invaluable assistance to us in a time of great pressure.

Although careful enquiries were made into the source of the first case, a history of contact with a previous patient could not be established. In the absence of other contact it is to be presumed that infection was carried in cotton treated by the patient, and which, as subsequently ascertained, came from an infected district.

In two of the cases infection was conveyed by an undertaker, immune himself by reason of vaccination and revaccination, who carried out the funeral arrangements of the original case.

The appended tree shows the origin of the cases :—



(Indirect infection from No. 1 by undertaker).

SCARLET FEVER.

During 1934, 665 cases of scarlet fever were notified, an incidence of 5·54 cases per 1,000 living. Four hundred and four cases, or 60·7% of those notified, were removed to the Hospital.

The majority of the cases were mild, only five deaths occurring, a figure equivalent to a case mortality rate of 0·75%.

As in 1933 the heaviest incidence was amongst the 5–15 age group, where 400 cases, or 60·1% of the total notified, occurred.

Scarlet fever anti-toxin is supplied free of charge to practitioners desirous of passively immunising immediate contacts of the disease.

Ten " return " cases were brought to the notice of the Health Department during the year.

Nine cases developed a secondary attack during their stay in Hospital.

Although no definite scheme exists for active immunisation against Scarlet Fever, 10 persons were Dick-tested, and six actively immunised during the year.

In the latter half of February and the first three weeks of March 209 cases of Scarlet Fever were notified, of which number 110 were in the Preston New Road district. In the latter district the occurence of primary cases was due to contact with an unrecognised case in the person of a youth engaged in the delivery of milk. Forty primary cases (in their turn responsible for approximately 70 secondary or tertiary infections) occurred as a result either of personal contact with this youth, or of the consumption of loose milk infected by him during the course of delivery.

In view of the fact that the outbreak was popularly attributed to bulk-infected milk, a special report was submitted to the Health Committee, a copy of which is appended :—

PUBLIC HEALTH OFFICE,
VICTORIA STREET,
BLACKBURN,
7th March, 1934.

To the Chairman and Members of the Health Committee,
County Borough of Blackburn.

MR. CHAIRMAN, MADAM AND GENTLEMEN,

I beg to submit the following report on the recent outbreak of scarlet fever in the Revidge and Preston New Road districts.

On February 6th two children (Cases 1 and 2 of the series) of a Blackburn dairy farmer, Mr. A., sickened of scarlet fever, were so notified to this Department on the 7th February, and removed to Hospital on the 8th February, following investigation. On receipt of notification the farm-house (in which no process connected with milk production is carried out) was disinfected. The Veterinary Officer made an immediate inspection of the dairy premises and secured a thorough steam-sterilisation of all milk utensils, etc.

As the farm-house is approximately 100 yards remote from the dairy, and as the above cases of scarlet fever had not had access to the dairy or cow-sheds since onset of illness, no further action was considered necessary in connection with the milk supply.

On the 7th February a child (Case 3 of the series), whose parents purchase their milk from Mr. A., sickened of scarlet fever. As this disease was then prevalent throughout the town this isolated case could not then be attributed to milk-borne infection.

On the 12th February nine further cases (Nos. 4—12 inclusive of the series) were investigated, all of whom were found to have consumed milk supplied by Mr. A., and lived in an area hitherto comparatively free from scarlet fever.

I visted Mr. A's. premises immediately, and there made a personal investigation. The occupants of the farm-house, namely, Mr. A., his wife and son, were examined, but offered no evidence of infection. On making careful enquiry from Mr. A., I ascertained that a youth, B, employed by Mr. A., for purposes connected with the delivery of milk, but not with the actual dairy processes, had been sent off work on the 3rd February, complaining of nausea, slight sore throat, and general malaise. He did not deliver any milk on the later date. " B " visited his private practitioner, but as he showed no rash, complaining only of slight sore throat, he was passed as fit for duty on the 7th February, and resumed his milk-round on February 8th.

Examined by myself on the 12th February, " B " showed slight " peeling " on both sides of the neck. This, together with the history of his recent illness, led me to believe that he had suffered from a mild attack of scarlet fever, but was convalescent, although potentially infective at the time of examination.

I ordered " B " home forthwith, secured re-disinfection of the farm premises, and arranged with the Veterinary Officer that the following procedure should be carried out to his satisfaction, namely :—

(1) All milk utensils, etc., to be steam sterilised ;

(2) Delivery vans to be washed with strong disinfectant, and

(3) All milk to be heat treated (under the supervision of an officer of the Health Department) at the farm prior to distribution ; effective pasteurisation to be ensured by " holding " the milk at a temperature of 150° F. for thirty-five minutes.

It was, however, inevitable that numerous cases of scarlet fever would follow in the direct wake of " B " for a period of approximately seven days subsequent to the 12th February, and that a further crop of cases would result from those directly infected by " B."

It is now important to note carefully the appended facts :—

(1) The distribution area covered by Mr. " A," is split up into three sections, served by Mr. " A," his son " C,", and the boy " B" respectively. An approximate total of 150 families is normally supplied with milk produced at Mr. " A's " farm.

(2) Milk is despatched from the Farm both " loose " and in sealed bottles. The boy " B " was in the habit of distributing each day 14 sealed bottles of milk, and approximately four gallons of " loose " milk contained in four kits, the loose being transferred by " B " from the kits into the proffered receptacle by means of an appropriate measure.

(3) Two Corporation Open Air Classes, with a joint population of approximately 80 children (the majority presumably susceptible to scarlet fever) are supplied with a total of six gallons of loose milk per day from Mr. " A's " farm. The milk is delivered at one school (population 52) by Mr. " A's " son, " C," and at the other school (population 26) by the Corporation Tramway Department.

That " B " proved a heavy source of infection is shown in the appended Table.

TABLE 39.

CASES OF SCARLET FEVER ON MR. "A's" ROUND.

DATE		TOTAL CASES		MILK DELIVERED BY				
Notified	Onset	Consumed Loose Milk	Consumed Bottled Milk	Tram	Mr. "A."	"B."	"C."	Unknown
7th Feb.	5th and 6th	(Children	of Mr. A.)	—	—	—	—	—
9th Feb.	7th Feb.	1	1	—	—	1	1*	—
12th Feb.	9th—11th Feb.	8	1	—	—	6	3*	—
13th Feb.	10th and 11th	(?) 6 or 7	(?) 1	1*	—	4	1*	1
14th Feb.	10th and 12th	5	—	—	—	5	—	—
15th Feb.	9th—13th	6	—	—	—	6	—	—
16th Feb.	13th—15th	4	2	—	—	5	1*	—
17th Feb.	12th—14th	6	—	—	—	6	—	—
19th Feb.	11th—16th	6	4	—	—	7	2*	1
		42 or 43	8 or 9	1*	—	40	8*	2
		51						

*Cases from previously infected areas.

Mr. A. — Farmer. "B" — Infected Boy. "C." — Farmer's son.

Between the 19th and 28th February 13 further cases of scarlet fever have been notified as occurring amongst members of families supplied with milk from Mr. A's farm. Enquiry proves that 10 of these cases are not primary infections either from " B " or from milk kitted by him. Two of the latter group of cases are definitely secondary to ones previously notified, six are secondary to " missed " and abortive cases of scarlet fever with whom the patients have been in contact, and two cases are probably due to chance contact in a heavily infected area. The remaining three cases, however, are due either to contact with " B " or to the consumption of milk delivered by him.

After very thorough investigation, I am satisfied that the high prevalence of scarlet fever amongst persons whose milk supply comes from Mr. A's farm is due, not to infection of the milk at source, but to contact with the boy, " B."

This conclusion is based on the following facts :—

(1) Of 51 primary cases, 80 per cent. can be proved to have occurred on the round served by " B."

(2) Although eight cases have been notified as occurring on " C's " round, and one case where the milk is delivered by tram, these nine cases reside in districts previously infected with scarlet fever, and owe their infection to a chance contact ;

(3) Had the epidemic been due to the consumption of bulk-infected milk, infection would have simultaneously occurred amongst all families served by Tram, by Mr. " A," by " C," and by " B " respectively. This was not the case.

(4) It has been stated above that Mr. " A " supplies two schools of aggregate population 80 with approximately six gallons of milk per day, delivered either by tram or by " C."

Although the majority of these 80 children are susceptible to scarlet fever, only nine cases have occurred amongst them, in none of which has it been possible to exclude a source or sources of infection other than the milk in question.

(5) The incubation period of scarlet fever is rarely less than two or greater than seven days. The boy " B " delivered milk between the 7th and 12th February, whilst in an infective condition, being sent off duty on the latter date. Were infection being carried by him the primary heavy " crop " of infection would occur on his (" B's ") round between the 9th and 18th February, which was the fact.

Although " B " has now ceased to be a source of danger, further cases of scarlet fever will occur in the affected area consequent upon infection disseminated from secondary and even tertiary sources.

I have the honour to be,

Mr. Chairman, Madam and Gentlemen,

Your obedient servant,

V. T. THIERENS,

Medical Officer of Health.

TABLE 40.

SCARLET FEVER.

Year.	Cases Notified in Blackburn.	Attack Rate per 100,000 of population.	No. of Deaths.	Percentage of Deaths to cases notified.	All Cases Admitted to Hospital.		
					No. Admitted	No. of Deaths.	Percentage of Deaths to cases treated.
1906	849	635·5	33	3·88	625	27	4·30
1907	544	479·0	21	3·86	381	12	3·10
1908	595	439·8	20	3·36	434	18	4·10
1909	1013	744·1	53	5·23	760	39	5·10
1910	795	580·3	27	3·39	538	17	3·10
1911	343	248·9	10	2·91	241	5	2·00
1912	116	87·1	3	2·59	78	2	2·50
1913	268	200·8	1	0·37	199	2	1·01
1914	704	524·1	10	1·40	560	6	1·07
1915	460	341·5	6	1·30	360	5	1·40
1916	153	116·1	4	2·60	101	2	1·90
1917	96	76·0	2	2·08	68	1	1·50
1918	150	120·1	2	1·30	122	2	1·60
1919	136	103·6	2	1·47	105	2	1·90
1920	181	120·9	3	1·60	164	3	2·40
1921	211	163·0	1	0·40	162	1	0·60
1922	231	178·5	2	0·80	186	2	0·80
1923	216	167·4	0	0·00	181	0	0·00
1924	70	54·2	1	1·43	62	1	1·60
1925	304	239·5	3	0·98	274	3	1·10
1926	218	175·2	1	0·46	192	1	0·53
1927	125	100·4	1	0·80	116	1	0·86
1928	121	96·7	0	0·00	104	0	0·00
1929	761	607·3	2	0·26	634	1	0·15
1930	342	272·1	0	0·00	285	0	0·00
1931	81	65·3	0	0·00	64	1	1·56
1932	232	189·8	1	0·43	189	1	0·52
1933	549	452·5	2	0·36	430	2	0·46
1934	665	554·7	5	0.75	404	1	0·24

DIPHTHERIA.

During the year 90 cases of diphtheria were notified, a figure equivalent to an attack rate of 0·75 per 1,000 of population. There were four deaths. giving a mortality rate of 4·44 per 100 cases notified.

Forty-four, or 44·4% of the cases occurred in the 5—15 age group.

Eighty-six cases, or 95·5% of the total notified, were removed to Hospital.

The disease was of a moderately severe type.

The practitioners, as a body, avail themselves of the anti-toxin provided by the Health Department. During 1934, 752,000 units of anti-toxin were so dispensed.

There is an increasing tendency to administer anti-toxin at an early stage of the disease and to suspect cases, and the majority of local practitioners are sensible of the need of adequate dosage. More reliance is now placed upon clinical evidence as an aid to diagnosis than was the case some five or six years ago, and there is a diminishing tendency to attach undue importance to the negative swab.

TABLE 41.

DIPHTHERIA.

Year.	Cases Notified in Blackburn.	Attack Rate per 100,000 of population.	No. of Deaths.	Percentage of Deaths to cases notified.	All Cases Admitted to Hospital.		
					No. Admitted	No. of Deaths.	Percentage of Deaths to cases treated.
1906	166	124·2	26	15·7	56	5	8·9
1907	150	111·5	17	11·3	63	5	7·9
1908	100	73·9	12	12·0	39	0	*Nil.*
1909	102	74·9	18	17·6	29	5	17·2
1910	96	70·0	22	22·9	42	9	21·4
1911	107	77·6	28	26·1	54	9	16·6
1912	55	41·3	9	16·4	36	5	13·9
1913	76	56·7	7	9·2	55	7	12·7
1914	62	46·1	7	11·3	37	2	5·4
1915	39	28·9	8	20·6	24	3	12·5
1916	52	39·5	9	17·3	32	3	9·3
1917	50	39·5	8	16·0	41	4	9·9
1918	57	45·6	11	19·3	56	4	7·1
1919	30	22·8	3	10·0	24	1	4·1
1920	69	49·3	10	14·5	59	7	13·2
1921	45	34·8	6	13·4	27	3	11·0
1922	52	40·1	7	13·4	38	6	13·0
1923	35	27·1	1	2·8	32	1	3·1
1924	62	48·0	3	4·8	48	2	4·1
1925	67	52·8	8	11·9	58	6	7·7
1926	81	65·0	8	9·9	73	8	9·3
1927	99	79·5	11	11·1	106	12	11·3
1928	124	99·1	14	11·2	111	7	6·3
1929	197	157·2	18	9·1	175	16	9·2
1930	133	106·0	9	6·7	125	12	9·6
1931	57	46·0	2	3·5	50	3	6·0
1932	95	77·7	7	7·3	91	9	9·8
1933	109	89·7	5	4·5	99	5	5·0
1934	90	75·0	4	4·4	86	4	4·6

SUPPLY OF ANTITOXIN TO PRACTITIONERS.

A supply of antitoxin for the use of practitioners is kept at the Health Office. A further quantity is kept at the Police Office, to which practitioners apply when the Health Office is closed.

Practitioners are advised to administer prophylactic doses of anti-toxin to immediate contacts of cases of diphtheria. On request anti-toxin is supplied free for this purpose.

DIPHTHERIA PREVENTION.

The work of immunisation was continued, and during the year a total of 589 children underwent treatment. This number is small when compared with the number inocculated during 1933, but pressure of other work reduced the time previously available for this branch of the health service.

TABLE 42.

CHILDREN IMMUNISED AT SCHOOL.

Total No. Innoculated.		*Three Innoculations.*		*Two Innoculations.*		*One Innoculation.*
548	...	497	...	29	...	22

SCHICK TESTS PERFORMED AT SCHOOL.

Total.		*Negative.*		*Positive.*		*Failed to attend for Reading.*
344	...	311	...	33	...	—

TABLE 43.

IMMUNISATIONS AT HEALTH DEPARTMENT CLINIC.

Total.		*Three Innoculations.*		*Two Innoculations.*		*One Innoculation.*
41	...	35	...	3	...	3

SCHICK TESTS PERFORMED AT HEALTH DEPARTMENT CLINIC.

Total.		*Negative.*		*Positive.*		*Failed to Attend for Reading.*
7	...	5	...	2	...	—

TABLE 44.

Total Immunisations at all Diphtheria Prevention Clinics.		*Total Schick Tests Performed at all Clinics.*
589	...	351

ENTERIC FEVER.

Three cases of enteric fever were notified in the Borough and none terminated fatally.

PUBLIC HEALTH (INFECTIOUS DISEASES) REGULATIONS, 1927.

One hundred and sixty-three cases of acute primary and acute influenzal pneumonia were notified in 1934, compared with 253 in 1933. Thirty-five of these cases terminated fatally, which represents a case mortality of 21·47, compared with 9·48% in 1933.

MEASLES.

This disease is not notifiable under the Infectious Diseases (Notification) Act.

Forty-two cases were brought to the notice of the Public Health Department by parents and teachers. The cases notified in previous years were: 1,994 in 1933; 68 in 1932; 447 in 1931; 1,976 in 1930; 242 in 1929; 67 in 1928; 1,272 in 1927; and 619 in 1926.

No deaths from measles occurred during the year.

WHOOPING COUGH.

This disease is not notifiable. Such cases as were brought to the notice of the Health Department were ascertained through the agency of teachers, school attendance officers, and the Maternity and Child Welfare Centres. The number of cases (152) was higher than in 1933, when 124 cases were notified; 5 deaths occurred from this cause, a case mortality rate of 3·28%, compared with 1·61% in 1933.

DIARRHŒA.

This disease is voluntarily notifiable in Blackburn between July 1st and October 31st of each year, notification being required in respect of children under two years of age. Only one case was notified during the year.

Diarrhœa was certified as the cause of eight deaths.

Seven of the deaths were in respect of infants under one year of age ; one was in the 2—5 age group.

The death rate per 1,000 births for the age group under two years was 4·85 ; the corresponding figure in 1933 was 6·17, and 3·24 in 1932, and 6·4 in 1931.

CHICKEN-POX.

During 1934 734 cases were notified by parents, school teachers, etc., compared with 419 cases notified in 1933, and 436 cases in 1932 ; including 280 notified by Medical Practitioners, during the period February 14th, 1934, to May 16th, 1934.

ANTHRAX.

No cases of human anthrax occurred in Blackburn during the year.

ENCEPHALITIS LETHARGICA.

During 1934 four cases were notified as encephalitis lethargica. Four cases were certified as having died from encephalitis lethargica during the year.

No special arrangements exist for the after-care of cases of encephalitis lethargica, although accommodation is available at Queen's Park Hospital for this class of case.

OTHER NON-NOTIFIABLE DISEASES.

Full use is made of information received from teachers and school attendance officers respecting the occurrence of cases of measles and whooping-cough, etc. These cases are followed up and investigated by the District Sanitary Inspectors, who submit investigation reports to the Medical Officer of Health.

INFLUENZA.

Influenza was not prevalent during the year. There were 11 deaths, a figure equivalent to 0·09 deaths per 1,000 population.

TABLE 45.

Vaccination Returns, 1934.

Month	Births	Successfully Vaccinated	Exempted	Died Unvaccinated	Vaccination Postponed	Removed not traced	Removed traced	Unaccounted for	Insusceptable
January	137	50	74	4	2	—	1	6	—
February ..	136	58	63	8	2	—	1	4	—
March	131	42	76	8	1	—	1	3	—
April	116	37	63	6	2	1	1	6	—
May	164	55	85	11	4	1	1	7	—
June	124	38	69	8	3	1	1	4	—
July	127	33	79	6	1	—	—	8	—
August	131	28	85	5	—	—	—	12	1
September ..	115	17	71	4	2	—	2	19	—
October.. ..	129	10	73	3	3	1	—	39	—
November ..	118	3	36	3	3	1	—	72	—
December ..	107	—	19	8	—	—	—	80	—
Totals ..	1535	371	793	74	23	5	8	260	1

From the above Table it will be noted that of 1,535 children born during the year only 371, or 24·1%, were successfully vaccinated, and exemptions were successfully claimed in respect of 793 children, or 51·6% of those born.

CORPORATION HOSPITAL.

There are 124 beds at the Corporation Hospital, allotted as follows :—

Scarlet Fever	30 beds
Diphtheria	16 beds
Tuberculosis	64 beds
Other Infectious Diseases	14 beds

TABLE 46.

Corporation Hospital.

	Patients remaining in Hospital on January 1st, 1934.			*Patients admitted and Discharged in 1934.*			*Patients remaining in Hospital on December 31st, 1934*			*Analysis of all cases admitted in 1934 whether discharged or not during the year.*					*Average number of beds occupied during 1934*	*Cases removed expressed as a percentage of total notified*
	Total	*Re-cover'd*	*Died*	*Total*	*Re-covered*	*Died*	*Total*	*Re-covered*	*Died*	*Total*	*Re-covered*	*Died*	*Case Mor-tality %*	*Av. No of days in Hosp'l*		
Tuberculosis	44	41	3	73	62	11	27	26	1	100	88	12	12·00	84·62	23·24	—
INFECTIOUS DISEASES																
Scarlet Fever ..	54	54	—	351	350	1	69	69	—	420	419	1	0·24	35·63	41·00	60·7
Diphtheria	18	18	—	80	75	5	14	14	—	94	89	5	5·32	48·29	12·44	95·5
Enteric Fever ..	—	—	—	3	3	—	—	—	—	3	3	—	0·00	47·00	0·13	100·0
Measles	—	—	—	1	1	—	—	—	—	1	1	—	0·00	15·00	0·04	—
Erysipelas	—	—	—	13	12	1	—	—	—	13	12	1	7·69	23·54	0·84	24·2
Chicken Pox ..	—	—	—	7	5	2	—	—	—	7	5	2	28·57	4·28	0·08	—
Other Diseases ..	—	—	—	8	8	—	—	—	—	8	8	—	0·00	20·30	0·44	—
Puerperal Fever ..	—	—	—	2	2	—	—	—	—	2	2	—	0·00	24·70	0·14	25·0
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS	72	72	—	465	456	9	83	83	—	548	539	9	1·64	36·90	55·39	—

There has been a slight increase in the average duration of Hospitalisation of Scarlet Fever cases. This is due, not to a high incidence of severe complications, but rather to the occurrence of such minor complications as excoriation of the nostrils, cracked ears and lips, cervical adenitis, etc.

SCARLET FEVER.

Four hundred and twenty cases of scarlet fever were admitted to the Hospital during the year, of which one terminated fatally. This is equivalent to a case mortality of 0·23%.

Anti-toxin is administered to all cases of scarlet fever admitted on or before the 3rd day of disease, and patients are no longer detained in hospital until desquamation ceases, provided always that no discharges or septic sores are present.

The following Table gives the ages and sexes of the patients admitted :—

TABLE 47.

Ages.	*Males.*	*Females.*	*Totals.*	*Deaths.*
0— 1 years ..	—	2	2	—
1— 2 ,, ..	1	7	8	—
2— 3 ,, ..	17	9	26	—
3— 4 ,, ..	17	17	34	—
4— 5 ,, ..	12	9	21	—
5—10 ,, ..	92	84	176	1
10—15 ,, ..	46	49	95	—
15—25 ,, ..	13	27	40	—
25—35 ,, ..	1	13	14	—
35—45 ,, ..	—	2	2	—
45 and over ..	1	1	2	—
Total, 1934 ..	200	220	420	1
Total, 1933 ..	232	231	463	2
Total, 1932 ..	86	121	207	1
Total, 1931 ..	31	51	82	1
Total, 1930 ..	131	176	307	1

The following Table is an analysis of all cases admitted to the Corporation Hospital as Scarlet Fever.

TABLE 48.

Age Groups (Years).		Day of Disease on Admission							Proved to be Scarlet Fever	Complications																	Sent in as Scarlet Fever proved to be			Deaths
		1	2	3	4	5	6	7		Excoriations Lips, Nostrils etc.	Nephritis	Tonsilitis.	Br. Pneumonia	Phlyc. Keratitis	Rhinorrhoea	Serum Rash	Otorrhoea	Cervical Adenitis	Septic Fingers	Rheumatism	Abscesses	Ac. Mastoiditis	Endocarditis	Phlebitis	Ophthalmitis	Cardiac Irreg.	Erythema	Jaundice	Bronchitis	
0—5	M.	2	17	19	4	4	1	1	45	1	–	1	–	–	4	7	8	10	1	–	–	–	–	–	–	–	1	–	2	–
	F.	4	13	13	6	3	–	2	40	3	2	1	3	–	2	4	3	3	–	–	–	1	–	–	–	–	–	1	–	–
5—10	M.	5	36	25	17	3	3	2	91	6	2	6	–	–	4	6	2	12	6	–	1	1	–	–	1	–	–	–	–	1
	F.	4	26	15	17	4	1	17	81	6	2	1	–	1	4	10	10	8	5	2	–	–	–	–	–	–	2	–	1	–
10—15	M.	4	14	12	9	5	1	3	48	3	2	2	–	–	–	5	1	1	1	–	–	–	1	–	–	1	–	–	–	–
	F.........	4	13	11	10	5	4	2	48	3	1	2	–	–	2	8	1	2	1	1	–	–	–	–	–	–	1	–	–	–
15—20	M.	–	2	–	3	3	–	1	9	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–
	F.	–	3	3	3	2	1	–	11	1	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	1	–	–	–
20+	M.	–	1	4	1	–	–	1	7	–	–	–	–	–	–	1	–	–	–	2	–	–	–	–	–	–	–	–	–	–
	F.	1	3	8	5	3	1	10	27	–	–	–	–	–	–	1	1	3	1	4	–	–	–	–	–	–	4	–	–	–
		420							407																		13			

Of the 26 cases with otorrhœa, two developed acute mastoiditis, necessitating operation—in one case a double mastoidectomy—which was performed by Mr. J. M. Wishart.

The following Table shows the percentage of Scarlet Fever removals in Wards, 1934 :—

TABLE 49.

Ward.	1933 *Percentage*	1934 *Percentage.*
St. Stephen's	84·0	56·9
Trinity	94·2	77·1
St. Michael's	69·2	43·7
St. John's	100·0	57·1
St. Silas's	73·6	29·2
St. Paul's	81·0	72·7
St. Peter's	80·0	77·4
St. Mary's	91·3	100·0
St. Matthew's	73·7	70·2
St. Thomas's	74·5	70·4
Park	60·0	69·1
St. Luke's	88·4	61·2
St. Mark's	70·0	65·3
St. Andrew's	79·2	60·0
TOTAL	78·3	60·7

Monthly Admissions of Scarlet Fever Cases to the Corporation Hospital during 1934 :—

TABLE 50.

Month.	1933.			1934.		
	Cases Notified.	*Cases Removed.*	*Percentage of Removals.*	*Cases Notified.*	*Cases Removed.*	*Percentage of Removals.*
January	48	35	72·9	51	30	58·8
February .	18	15	83·3	121	37	30·5
March	35	24	68·5	89	28	31·4
April	38	29	76·3	43	32	74·4
May	59	52	88·1	30	24	80·0
June	36	31	86·1	39	33	84·6
July	33	33	100·0	27	23	85·2
August	31	21	67·7	16	14	87·5
September ..	62	49	79·1	28	27	96·4
October ..	62	46	74·1	43	31	72·1
November ..	79	61	77·2	79	56	70·9
December ..	48	34	70·8	99	69	69·6
TOTAL ..	549	430	78·3	665	404	60·7

Cases of scarlet fever are removed to Hospital on request by the general practitioner in charge of the case. Such request is invariably reserved for cases where home isolation or nursing presents difficulty.

DIPHTHERIA.

Ninety-four, of which eight were from outside the Borough, were admitted to Hospital during 1934.

Seven of these cases proved not to be diphtheria, but were suffering from the undermentioned conditions :—

Scarlet Fever	2
Tonsillitis	5
	7

The following is an analysis of the cases admitted as diphtheria :—

TABLE 51.

Age Groups (Years)		Day of Disease on Admission								Types of Diphtheria						Complications								Sent into Hospital as Diphtheria but Proved to be			Deaths	
		1	2	3	4	5	6	7+		Laryngeal	Tonsillar and Faucial	Naso Pharyngeal	Nasal	Carrier		Serum Rash	Nasal Phonation	Cardiac Irregularity	Muscular Atony	Adenitis	Strabismus	Rheumatism		Scarlet Fever	Tonsilitis			
0—5 ...	M ...	–	3	6	2	–	1	3	–	7	8	–	–	–	–	–	2	4	1	1	1	–	–	–	–	–	–	–
	F. ...	–	2	3	4	1	2	1	–	2	10	1	–	–	–	1	1	6	–	2	–	–	–	–	–	–	1	–
5—10 ...	M. ...	1	5	9	4	–	1	3	-	3	16	1	–	2	–	3	3	5	–	2	–	–	–	–	1	–	1	–
	F. ...	–	1	3	–	1	1	2	–	1	5	1	1	–	–	2	1	2	–	–	3	–	–	–	–	–	1	–
10—15	M. ...	–	1	2	1	–	–	1	–	–	4	–	–	-	–	3	1	1	1	–	–	–	–	–	1	–	–	–
	F. ...	1	2	5	1	–	–	1	–	–	9	–	–	–	–	4	1	3	–	1	–	1	–	–	1	–	–	-
15—20 ...	M. ...	–	1	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	F. ...	1	1	1	–	–	–	1	–	–	4	–	–	–	–	3	–	–	–	–	–	–	–	–	–	–	–	-
20+... ...	M. ...	–	–	1	2	–	–	1	–	–	2	1	–	–	–	–	–	–	–	1	–	–	–	1	–	–	1	–
	F. ...	–	5	4	1	–	–	1	–	–	7	1	–	–	–	3	–	–	–	1	–	–	–	1	2	–	1	-
		94								87														7			5	

The type of diphtheria prevalent throughout the year was not as severe as during 1933. The death rate of 4·6 was the lowest recorded during the past decade.

During the year 13 cases of laryngeal and tracheal diphtheria were admitted to the Corporation Hospital. Tracheotomy was not necessary in any of the cases.

TABLE 52.

INCIDENCE OF DIPHTHERIA CASES ADMITTED TO HOSPITAL.

Ages.	*Males.*	*Females.*	*Totals.*	*Deaths.*
Under 1 year.. .. .	—	—	—	—
1—2 years	1	1	2	—
2—3 years	1	5	6	—
3— 4 years..	3	2	5	1
4— 5 years..	9	3	12	—
5—10 years..	23	10	33	2
10—15 years..	4	11	15	—
15—25 years..	5	7	12	1
25—35 years..	1	3	4	—
35 years and over ..	—	5	5	1
TOTALS, 1934	47	47	94	5
TOTALS, 1933	70	63	133	6
TOTALS, 1932 .. .	42	66	108	11
TOTALS, 1931	27	29	56	3
TOTALS, 1930	60	81	141	13

The following Table shows the percentage of Diphtheria removals in Wards, 1934 :—

TABLE 53.

Ward.	1933 *Percentage.*	1934 *Percentage.*
St. Stephen's	100·0	100·0
Trinity	100·0	100·0
St. Michael's	83·3	50·0
St. John's	91·6	100·0
St. Silas's	83·3	100·0
St. Paul's	85·7	85·7
St. Peter's	100·0	100·0
St. Mary's	100·0	100·0
St. Matthew's	100·0	100·0
St. Thomas's	100·0	100·0
Park	100·0	92·8
St. Luke's	100·0	100·0
St. Mark's	100·0	100·0
St. Andrew's	100·0	100·0
TOTAL	90·8	95·5

TABLE 54.

The monthly incidence of Diphtheria in Blackburn was :—

Month.	1933.			1934.		
	Cases Notified.	*Cases Removed.*	*Percentage of Removals.*	*Cases Notified.*	*Cases Removed.*	*Percentage of Removals.*
January	8	8	100·0	3	3	100·0
February	1	—	0·0	8	7	87·5
March	12	11	91·7	11	11	100·0
April	8	8	100·0	1	1	100·0
May	22	21	95·4	4	4	100·0
June	12	10	83·3	9	9	100·0
July	4	4	100·0	12	12	100·0
August	6	5	83·3	8	7	87·5
September	12	11	91·7	7	7	100·0
October	7	7	100·0	6	6	100·0
November	8	6	75·0	6	6	100·0
December	9	8	88·0	15	13	86·6
TOTAL	109	99	90·8	90	86	95·5

TABLE 55.

ENTERIC FEVER.

Age Period.	*Males.*	*Females.*	*Total.*	*Deaths.*
Under 10 years	1	—	1	—
10—15 years..	—	—	—	—
15—25 years..	—	1	1	—
25—35 years..	—	—	—	—
35—45 years..	—	—	—	—
45 and upwards .. .	—	1	1	—
TOTAL..	1	2	3	—

OTHER DISEASES.

TABLE 56.

AGE PERIODS.

Disease.	0—1		1—2		2—5		5—15		15—25		25—35		35—45		45 & up		Total	Deaths
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Whooping Cough ..	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–
Measles	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	1	–
Puerperal Fever ..	–	–	–	–	–	–	–	–	–	1	–	–	–	1	–	–	2	-
Puerperal Pyrexia ..	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Erysipelas	–	–	–	–	–	–	-	1	–	1	1	1	2	–	4	3	13	1
Chickenpox	–	–	–	–	-	–	1	-	1	2	–	1	-	1	1	-	7	2
Ophthalmia Neonatorum ..	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–
Meningitis	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1	–
No Disease	–	2	–	–	–	–	–	–	–	–	–	-	–	–	-	–	2	–
Other Diseases ..	–	–	–	-	–	–	–	–	–	1	–	2	–	–	–	–	3	–
	1	3	–	-	1	–	1	1	1	5	1	5	2	2	5	3	31	3

Selected and complicated cases of measles and whooping cough are admitted to the Corporation Hospital. Such admissions have been made possible by the recent addition of extra cubicles to Ward III.

TABLE 57.

OUT OF BOROUGH CASES.

Disease.	*Males.*	*Females.*	*Total.*	*Deaths.*
Scarlet Fever	4	12	16	—
Diphtheria	2	6	8	1
Measles	—	—	—	—
Erysipelas	1	1	2	—
Puerperal Fever	—	1	1	—
No disease	—	—	—	—
Other Diseases	1	—	1	—
TOTAL	8	20	28	1

TABLE 58.

ADMISSIONS FROM THE BLACKBURN ROYAL INFIRMARY.

Disease.	*Male.*	*Female*	*Total*	*Deaths*
Scarlet Fever	—	2	2	—
Diphtheria	—	2	2	—
Erysipelas	1	2	3	—
Tonsillitis	—	1	1	—
TOTAL	1	7	8	—

ADMISSIONS FROM QUEEN'S PARK HOSPITAL.

Disease	*Male*	*Female*	*Total*	*Deaths*
Scarlet Fever	3	2	5	—
Diphtheria	2	—	2	—
Chicken-Pox	—	1	1	—
TOTAL	5	3	8	—

Cases from the Blackburn and East Lancashire Royal Infirmary and Queen's Park Hospital are included in the Out-of-the-Borough Table, if the cases were not Blackburn residents.

BACTERIOLOGICAL EXAMINATIONS.

At the Corporation Hospital.

TABLE 59.

Examination and Material.	1934 *Positive*	1934 *Negative*	1934 *Total*	1933 *Total*
For Diphtheria Bacilli :—				
Swabs—				
Private Practitioners	18	322	340	481
Hospital	53	467	520	321
Others	0	15	15	40
For Tubercle Bacilli :—				
Sputum—				
Private Practitioners	21	79	100	131
Hospital	67	73	140	159
Tuberculosis Dispensary	37	120	157	150
Examination of Urine, Pus, etc. :—				
Private Practitioners	0	12	12	14
Hospital	0	20	20	16
Tuberculosis Dispensary	0	4	4	6
Totals	196	1112	1308	1318

Examinations at the Public Health Laboratories, Liverpool and Manchester, are contained in Part VIII of the Report.

DISINFECTION.

Number of Rooms Sprayed :—		
Tuberculosis		123
Fever		1119
Vermin		154
Institutions		51
Schools		118
Others		186
Articles Disinfected by Steam		13326
Number of Articles Destroyed by Consent of Owners		397
Amount of Disinfectant Distributed :—		
Chloros (Gallons)	Schools	250½
	Houses	140½
Persons Cleansed at Disinfection Station		13
Cleansings		50
Library Books Fumigated		384
Private Books Fumigated		198
School Books Fumigated		427

CLEANSING OF PERSONS.

During 1934, 13 persons were dealt with at the Throstle Street Disinfecting and Cleansing Station. The conditions for which baths were given were as under :—

Scabies	13

Seven of the persons dealt with were referred from the School Medical Department. The total number of baths given was 50.

PART V.

Prevalence of,
and
Control over,
Tuberculosis.

TUBERCULOSIS.

Incidence and Mortality.

During the year 110 cases of Tuberculosis, 89 Pulmonary and 21 Non-Pulmonary, were notified. In 1933 the notifications numbered 108 ; in 1932, 114 ; in 1931, 210 ; in 1930, 191 ; in 1929, 155 ; in 1928, 142 ; and in 1927, 151. The notification of Tuberculosis in the area has been fairly satisfactory and there have been no cases of wilful neglect or refusal to notify.

The number of deaths in 1934 from all forms of Tuberculosis was 78 ; Pulmonary Tuberculosis caused 67 deaths, and Non-Pulmonary Tuberculosis 11. Nine, or 11·53% of the deaths from Tuberculosis were in respect of cases which had not been notified during life.

Records of Previous Years.

Deaths from Tuberculosis	1934	1933	1932	1931	1930	1929	1928	1927	1926
Pulmonary	67	84	79	97	105	114	82	96	106
Non-Pulmonary	11	12	19	18	18	13	21	14	10

The number of deaths from all forms of Tuberculosis is equivalent to a rate of 0·65 deaths per 1,000 living.

Mortality Rate Per 1,000 Living Compared with that of England and Wales.

	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923
Blackburn...	...0·65	0·78	0·79	0·93	0·97	1·01	0·82	0·88	0·93	0·86	0·86	0·96
England & Wales...	—	0·82	0·89	0·89	0·89	0·96	0·93	0·97	0·96	1·04	1·06	1·03

Perusal of the above Table shows that the death rate from all forms of Tuberculosis in Blackburn compares favourably with the corresponding rate for England and Wales.

Of the cases notified during the year 30 died, 21 of the deaths being from Pulmonary, and nine from Non-Pulmonary disease.

The appended Table gives the age-groups of the cases notified and of the deaths for the year 1934.

TABLE 60.

Age Periods.	New Cases				Deaths.			
	Pulmonary		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under one year	—	—	2	—	—	—	2	—
1— 5 years	—	—	2	—	1	—	—	—
5—10 ,, ...	1	—	4	—	—	—	1	—
10—15 ,, ...	—	1	2	1	—	1	1	—
15—20 ,, ...	3	8	—	2	1	4	—	—
20—25 ,, ...	7	9	—	1	3	6	—	—
25—35 ,, ...	15	7	1	4	8	6	3	—
35—45 ,, ...	9	8	—	—	9	3	—	1
45—55 ,, ...	16	—	—	—	16	4	—	2
55—65 ,, ...	4	1	2	—	4	1	1	—
65 and upwards	—	—	—	—	—	—	—	—
Totals	55	34	13	8	42	25	8	3

Of cases notified during the year, the attack rate corresponds, in the case of males, to 1·03 per 1,000, and of females, to 0·64 per 1,000.

THE TUBERCULOSIS SCHEME.

During the year practitioners have referred 186 cases for examination at the Dispensary, and the Tuberculosis Officer has held 236 consultations with practitioners.

One hundred sputum examinations were undertaken for private practitioners, and 297 in respect of patients attending the Dispensary.

During the year the Nurse made 2,333 home visits, 189 of which were in respect of ex-Service men.

The appended Table, which relates to persons who were at home during the last quarter of 1934, demonstrates the difficulty experienced in securing isolation of this type of case :—

TABLE 61.

	On First Visit.	After-wards.
No. who occupy a separate bedroom	220	241
No. who occupy a separate parlour alone	8	12
No. who occupied a kitchen alone	3	3
No. who occupied a shelter in yard	—	—
No. who occupied a separate bed in a room occupied by :—		
One other person	29	28
Two other persons	26	22
Three other persons	6	5
Four other persons	1	1
Five other persons	1	1
Many other persons (Common Lodging House, &c.) .	6	7
No. who occupied a bed in common with :—		
One other person	129	117
Two other persons	5	3
Two beds in a room :—		
Two persons in each bed	12	10
Three persons in each bed	—	—
No. who occupy a bed in common with :—		
One other person, and another person in room	32	28
TOTAL	478	478

THE TREATMENT OF TUBERCULOSIS.

At the beginning of 1934 there were 444 Pulmonary and 103 Non-Pulmonary cases on the Dispensary Register.

The Tuberculosis Notification Register is a Register of all notified cases of Tuberculosis, whereas the Dispensary Register refers only to cases actually attending the Dispensary.

During the year 200 Pulmonary and 7 Non-Pulmonary cases were added to the Register, consequently 644 Pulmonary, and 110 Non-Pulmonary cases were dealt with during the year. At the end of the year there were 447 Pulmonary, and 108 Non-Pulmonary cases on the Register, 219 names having been removed in the course of the year by reason of :—Died, 44 ; transferred to other areas and lost sight of, 23 ; Non-Tuberculous, 132.

Of cases on the Register on December 31st, 1934, 40 were receiving no form of treatment. The majority of these were following their ordinary occupations.

Blackburn patients are admitted either to the Sanatorium Blocks at the Corporation Hospital, or to Meathop Sanatorium, Grange-over-Sands, where the Corporation reserves ten beds. The more advanced cases are received into the Corporation Hospital, the early cases, or those which have improved under treatment at the Corporation Hospital, being drafted to Meathop.

At the beginning of the year 25 males, 15 females, and four children were in-patients in the Sanatorium block ; during the year 61 males, 35 females, and four children were admitted ; on December 31st, 1934, 20 males, six females and one child were still undergoing treatment. In the course of the year 53 males, 42 females and seven children were discharged. Thirteen males and two females died.

During the year the average number of beds occupied by Tuberculosis cases at the Corporation Hospital was only 23·24. This was due to additional beds having been required for the reception of acute infectious disorders.

The appended Table shows the condition of patients on discharge from the Sanatorium Block :—

	Disease Quiescent	*Much Improved*	*No Change*	*Dead*
Males	21	27	5	13
Females	16	21	5	2
Children	4	3	–	–
	41	51	10	15

At the commencement of the year four males and five females were in-patients at Meathop Sanatorium, while during 1934 eight males and nine females were admitted. At the end of the year five males and five females remained at Meathop. The appended Table shows the condition of patients on discharge from Meathop :—

	Disease Quiescent	*Much Improved*	*No Change*	*Dead*
Males	3	4	–	–
Females	3	4	1	1
	6	8	1	1

NON-PULMONARY TUBERCULOSIS.

During the year 11 deaths were certified to be due to Non-Pulmonary Tuberculosis, compared with 12 in 1933, 19 in 1932, 18 in 1931, 18 in 1930, 13 in 1929, 21 in 1928, and 14 in 1927. The deaths were due to :—

	Male.	*Female.*
Tuberculous Meningitis	4	0
Bone and Joint Tuberculosis	3	1
Intestinal Tuberculosis	0	2
Tuberculosis of Larynx	1	0

Twenty-one cases of Non-Pulmonary Tuberculosis were notified. The diagnoses were :—

	Male.	*Female.*
Tuberculous Glands of Neck	3	2
Abdominal Tuberculosis	3	3
Intrathoracic Glands	1	1
Tuberculous Joint Disease	1	0
Tuberculous Bone Disease	1	2
Tuberculous Meningitis	4	0

BONE AND JOINT TUBERCULOSIS.

Twenty-nine cases of bone or joint tuberculosis were examined by Dr. Briggs at the Special Orthopædic Clinic.

DENTAL TREATMENT OF TUBERCULOSIS PATIENTS.

The following Table gives details of Dental work carried out as part of the Tuberculosis Scheme :—

The Dental Surgeons carried out the following work in 1934 :—

Number of Patients	6
Permanent Teeth extracted	4
Temporary Teeth extracted	2
Permanent Teeth Filled	5
Other Operations	2
Number of Sessions held	5

The following treatment was carried out at Meathop Sanatorium by the Dental Surgeon attached to that Institution. The cost of this treatment was borne by the Health Committee.

Number of Patients Treated	1
Dentures supplied	1

ULTRA-VIOLET LIGHT TREATMENT.

Particulars of the Ultra-Violet Light Treatment of Tuberculosis patients will be found in Table 89.

PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925

It was not found necessary to take any action during the year under the above regulations relating to tuberculous employees in the milk trade.

TABLE 62.

FORM T. 137/1931 MINISTRY OF HEALTH.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

	FORMAL NOTIFICATIONS.												
	Number of Primary Notifications of New Cases of Tuberculosis.												Total Notifications
Age Periods...	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total All Ages	
Pulmonary Males	–	–	1	–	3	7	15	9	16	4	–	55	58
,, Females...	–	–	–	1	8	9	7	8	–	1	–	34	37
Non-Pulmonary Males	2	2	4	2	–	–	1	–	–	2	–	13	14
,, Females...	–	–	–	1	2	1	4	–	–	–	–	8	9

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1924.

Number of cases of Tuberculosis remaining on the Register of Notifications kept by the Medical Officer of Health of the County Borough on the 31st December, 1934.

TOTAL CASES.	PULMONARY.			NON-PULMONARY.		
	Males	Females	Total.	Males	Females	Total
759	317	213	530	119	110	229

TABLE 63.

(Form T. 145 of the Ministry of Health).

Tuberculosis Dispensary—Work Carried Out During the Year 1934.

Part "A"

Diagnosis	Pulmonary				Non-Pulmonary				Total				Grand Total
	Ad'lts		Chil'n		Ad'lts		Chil'n		Ad'lts		Chil'n		
	M	F	M	F	M	F	M	F	M	F	M	F	
A.—New Cases examined during the year (excluding contacts) :													
(*a*) Definitely tuberculous ...	41	23	–	–	1	3	2	–	42	26	2	–	70
(*b*) Diagnosis not completed ...	–	–	–	–	–	–	–	–	12	11	6	3	32
(*c*) Non-tuberculous	–	–	–	–	–	–	–	–	35	35	6	8	84
B.—Contacts examined during the year :													
(*a*) Definitely tuberculous ...	1	–	–	–	–	–	–	1	1	–	–	1	2
(*b*) Diagnosis not completed ...	–	–	–	–	–	–	–	–	–	2	2	2	6
(*c*) Non-tuberculous	–	–	–	–	–	–	–	–	–	5	5	3	13
C.—Cases written off the Dispensary Register as :—													
(*a*) Recovered	1	2	–	–	–	–	–	–	1	2	–	–	3
(*b*) Non tuberculous (including any such cases previously diagnosed and entered on the Dispensary register as tuberculous)	–	–	–	–	–	–	–	–	48	51	16	16	131
D.—Number of Persons on Dispensary Register on Dec. 31st :													
(*a*) Diagnosis completed	225	145	22	17	25	22	37	24	250	167	59	41	517
(*b*) Diagnosis not completed ...	–	–	–	–	–	–	–	–	12	13	8	5	38

1.—Number of Cases on Dispensary Register on January 1st	547
2.—Number of Cases Transferred from other Areas and Cases returned after Discharge under Head 3 in previous years	2
3.—Number of Cases Transferred to other Areas, cases not desiring further assistance under Scheme and cases "lost sight of"	23
4.—Cases written off during year as Dead (all causes)	44
5.—Number of Attendances at the Dispensary (including Contacts)	4521
6.—Number of Insured Persons under Domiciliary Treatment on 31st December	207
7.—Number of Consultations with Medical Practitioners: (*a*) Personal	236
(*b*) Other	160
8.—Number of Visits by Tuberculosis Officer to homes (including personal consultations)	90
9.—Number of Visits by Nurses or Health Visitors to Homes for Dispensary Purposes	2333
10.—Number of:—(*a*) Specimens of sputum, etc., examined	397
(*b*) X-Ray Examinations made in connection with Dispensary work	377
11.—Number of "Recovered" Cases restored to Dispensary Register	—
12.—Number of "T.B. Plus" Cases on Dispensary Register on December 31st	214

Part "G."

TABLE 64. (Form T. 145 of the Ministry of Health)

RESULTS OF TREATMENT.

	Classification on Admission to the Institution	Condition at time of Discharge	Duration of Residential Treatment in the Institution															Grand Totals
			Under 3 months.			3–6 months			6–12 months			More than 12 months			Totals			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis.	Class T.B. Minus. ...	Quiescent	2	1	...	3	1	1	...	...	...	...	...	1	5	2	2	9
		Not Quiescent	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
		Died in Institution ...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
	Class T.B. plus. Group I.	Quiescent	...	...	...	2	3	...	...	...	...	...	...	...	2	3	...	5
		Not Quiescent	2	...	...	...	3	...	...	...	...	...	...	...	2	3	...	5
		Died in Institution ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Class T.B. plus. Group II.	Quiescent	3	2	...	6	4	1	3	...	...	1	1	...	13	7	1	21
		Not Quiescent	5	3	...	4	6	...	2	2	...	2	1	...	13	12	...	25
		Died in Institution ...	3	...	...	...	1	...	1	...	...	2	...	...	6	1	...	7
	Class T.B. plus. Group 3.	Quiescent	1	...	1	3	3	...	1	2	...	1	1	...	6	6	1	13
		Not Quiescent	4	1	...	4	4	...	3	1	...	1	3	...	12	9	...	21
		Died in Institution ...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
	Total (Pulmonary)...		21	7	1	24	25	2	10	5	...	7	6	1	62	43	4	109
Non-Pulmonary Tuberculosis.	Bones and Joints... ...	Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Not Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Died in Institution ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Abdominal	Quiescent	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
		Not Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Died in Institution ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Organs	Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Not Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Died in Institution ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Peripheral Glands ...	Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Not Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Died in Institution ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total (Non Pulmonary)		...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1

TABLE 65.

(FORM T. 145 OF THE MINISTRY OF HEALTH).

PART "C."—NUMBER OF BEDS AVAILABLE FOR THE TREATMENT OF TUBERCULOSIS ON THE 31ST DECEMBER IN INSTITUTIONS BELONGING TO THE COUNCIL.

NAME OF INSTITUTION	FOR PULMONARY CASES		FOR NON PULMONARY CASES		TOTAL
	Adults	Children	Adults	Children	
CORPORATION HOSPITAL... ...	27	3	...	...	30
MEATHOP SANATORIUM	10	...	...	...	10
Queen's Park Hospital	18	...	4	15	37

TABLE 66.

PART "D."—RETURN SHOWING EXTENT OF RESIDENTIAL TREATMENT DURING THE YEAR 1934.

		In Institutions on Jan. 1st	Admitt'd during the year	Discharged during the year	Died in the Institutions	In Institutions on Dec. 31st.
Doubtfully Tuberculous Cases Admitted for Observation	Adult Males...	3	1	3	...	1
	Adult Females.	5	...	3	...	2
	Children... ...	1	2	3	...	...
	Total	9	3	9	...	3
Number of patients suffering from Pulmonary Tuberculosis	Adult Males ...	26	68	57	13	24
	Adult Females.	15	44	47	3	9
	Children... ...	2	3	4	...	1
	Total	43	115	108	16	34
Number of patients suffering from Non-Pulmonary Tuberculosis	Adult Males...	...	...	...	...	...
	Adult Females.	...	...	...	...	...
	Children... ...	1	...	1	...	...
	Total	1	...	1	...	...
GRAND TOTAL ...	... ...	53	118	118	16	37

TABLE 67. (Form T. 145 of the Ministry of Health).

PULMONARY TUBERCULOSIS.

	Condition at the time of the last record made during the year to which the Return relates.		Previous to 1934. Class T.B. minus	Previous to 1934. Class T.B. plus. Group 1	Previous to 1934. Class T.B. plus. Group 2	Previous to 1934. Class T.B. plus. Group 3	Previous to 1934. Total (Class T.B. plus)	1934. Class T.B. minus	1934. Class T.B. plus. Group 1	1934. Class T.B. plus. Group 2	1934. Class T.B. plus. Group 3	1934. Total (Class T.B. plus)
(a) Remaining on Dispensary Register on 31st December.	Disease Arrested ...	Adults M.	17	4	11	1	16	...	...	...	...	...
		Adults F.	14	7	4	1	12	...	...	...	...	...
		Children	17	...	...	...	...	...	...	...	...	...
	Disease Not Arrested .	Adults M.	50	16	32	7	55	6	4	15	7	26
		Adults F.	16	13	24	3	40	4	4	9	1	14
		Children	4	1	...	...	1	...	...	...	...	...
	Condition not ascertained during year		67	19	22	8	49	...	...	...	...	...
	Total on Dispensary Register on December 31st		185	60	93	20	173	10	8	24	8	40
(b) Not now on Dispensary Register and reasons for removal therefrom.	Discharged as Recovered	Adults M.	19	...	1	...	1	...	...	...	...	...
		Adults F.	16	...	1	...	1	...	...	...	...	...
		Children	5	...	1	...	1	...	...	...	...	...
	Lost sight of or otherwise removed from Dispensary Register... ...		542	100	60	33	193	...	1	...	...	1
	Dead...	Adults M.	54	44	121	266	431	...	...	6	3	9
		Adults F.	48	35	114	194	343	...	1	2	2	5
		Children	32	7	33	54	94	...	...	...	...	...
	Total written off Dispensary Register		716	186	331	547	1064	...	2	8	5	15
	Grand Totals		901	246	424	567	1237	10	10	32	13	55

TABLE 67—*Continued*

NON-PULMONARY TUBERCULOSIS.

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1934.					1934.				
				Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.
(*a*) Remaining on Dispensary Register on 31st December.	Disease Arrested	Adults	M.	2	2	1	1	6	...	...	...	...	...
			F.	...	...	3	3	6	...	...	...	...	...
		Children		1	7	...	9	17	...	...	...	...	...
	Disease Not Arrested ...	Adults	M.	3	...	1	1	5	...	...	1	...	1
			F.	...	1	4	5	10	...	...	...	3	3
		Children		6	11	2	11	30	1	...	...	2	3
	Condition not ascertained during year			11	9	4	10	34	...	...	...	...	...
	Total on Dispensary Register on December 31st			23	30	15	40	108	1	...	1	5	7
Transferred to Pulmonary				2	...	1	9	12	...	...	...	...	...
(*b*) Not now on Dispensary Register and reasons for removal therefrom.	Discharged as Recovered	Adults	M.	2	...	...	2	4	...	...	...	...	...
			F.	1	...	...	2	3	...	...	...	...	...
		Children		4	1	4	20	29	...	...	...	...	...
	Lost sight of or otherwise removed from Dispensary Register ...			66	60	54	244	424	...	...	...	...	...
	Dead...	Adults	M.	22	17	9	4	52	...	...	...	...	...
			F.	14	17	10	2	43	...	...	...	...	...
		Children		18	36	28	6	88	...	...	...	...	...
	Total written off Dispensary Register			127	131	105	280	643	...	...	...	...	...
Grand Totals (excluding those transferred to Pulmonary) ...				150	161	120	320	751	1	...	1	5	7

TABLE 68.

TABLE SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS DISCHARGED FROM THE BLACKBURN CORPORATION HOSPITAL DURING 1934.

	Condition at time of Discharge.	PULMONARY TUBERCULOSIS.—Duration of Residential Treatment.												
		Under 3 months			3–6 months.			6–12 months			More than 12 months.			TOTAL
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
CLASS A. Cases in which Tubercle Bacilli have never been found	Quiescent	1	1	–	3	–	1	–	–	–	–	–	1	7
	Not Quiescent	–	1	–	–	–	–	–	–	–	–	–	–	1
	Died in Institution ...	1	1	–	–	–	–	–	–	–	–	–	–	2
CLASS B 1 Early cases in which Tubercle Bacilli have been found	Quiescent	–	–	–	2	3	–	–	–	–	–	–	–	5
	Not Quiescent	2	–	–	–	3	–	–	–	–	–	–	–	5
	Died in Institution ...	–	–	–	–	–	–	–	–	–	–	–	–	–
CLASS B 2 Intermediate Cases in which Tubercle Bacilli have been found ...	Quiescent	4	2	–	6	4	1	3	–	–	–	–	–	20
	Not Quiescent	6	3	–	3	6	–	2	2	–	–	–	–	22
	Died in Institution ...	4	–	–	–	1	–	1	–	–	2	–	–	8
CLASS B 3 Advanced cases in which Tubercle Bacilli have been found	Quiescent	1	–	1	3	3	–	1	2	–	1	1	–	13
	Not Quiescent	5	2	–	4	4	–	2	1	–	1	1	–	20
	Died in Institution ...	4	–	–	1	–	–	–	–	–	–	–	–	5
	TOTAL	28	10	1	22	24	2	9	5	–	4	2	1	108

	DIAGNOSIS ON DISCHARGE FROM OBSERVATION	FOR PULMONARY TUBERCULOSIS						FOR NON-PULMONARY TUBERCULOSIS						TOTALS
		Stay Under 4 Weeks			Stay Over 4 Weeks			Stay Under 3 Weeks			Stay Over 4 Weeks			
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
OBSERVATION CASES.	TUBERCULOSIS	–	–	–	–	–	1	–	–	–	–	–	–	1
	Non-Tuberculous	1	–	–	2	1	2	–	–	–	–	–	–	6
	Doubtful	–	–	–	–	2	–	–	–	–	–	–	–	2
	TOTALS	1	–	–	2	3	3	–	–	–	–	–	–	9

TABLE 69.

ANNUAL RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS DISCHARGED FROM MEATHOP SANATORIUM DURING THE YEAR 1934.

	Condition at time of discharge.	Pulmonary Tuberculosis.—Duration of Residential Treatment.												
		Under 3 months			3–6 months.			6–12 months.			More than 12 months.			Total.
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Class A Cases in which Tubercle Bacilli have never been found	Quiescent	1	2	–	–	1	–	–	–	–	–	–	–	4
	Not Quiescent	–	–	–	–	–	–	–	–	–	–	–	–	–
	Died in Institution ...		1	–	–	–	–	–	–	–	–	–	–	1
Class B 1 Early Cases in which Tubercle Bacilli have been found	Quiescent	–	–	–	–	–	–	–	–	–	–	–	–	
	Not Quiescent	–	–	–	–	–	–	–	–	–	–	–	–	
	Died in Institution ...	–	–	–	–	–	–	–	–	–	–	–	–	
Class B 2 Intermediate Cases in which Tubercle Bacilli have been found ...	Quiescent	–	–	–	–	–	–	–	–	–	1	1	–	2
	Not Quiescent	–	–	–	1	–	–	–	–	–	2	1	–	4
	Died in Institution ...	–	–	–	–	–	–	–	–	–	–	–	–	–
Class B 3 Advanced Cases in which Tubercle Bacilli have been found	Quiescent	–	–	–	–	–	–	–	–	–	–	–	–	–
	Not Quiescent	1	1	–	–	–	–	1	–	–	–	2	–	5
	Died in Institution ...	–	–	–	–	–	–	–	–	–	–	–	–	–
	Total	2	4	–	1	1	–	1	–	–	3	4	–	16

TABLE 70.

SHOWING THE EXTENT OF RESIDENTIAL TREATMENT FOR PULMONARY TUBERCULOSIS DURING 1934.

			In Institutions on Jan. 1st.	Admitted during 1934.	Discharged during 1934.	Died in the Institutions.	In Institutions on Dec. 31st, 1934.
Meathop Sanatorium	Adults	M.	4	8	7	—	5
		F.	5	9	8	1	5
	Children	M.	—	—	—	—	—
		F.	—	—	—	—	—
Corporation Hospital.	Adults	M.	25	61	53	13	20
		F.	15	35	42	2	6
	Children	M.	3	—	3	—	—
		F.	1	4	4	—	1
Residential Open-Air School. ...	Children	M.	—	—	—	—	—
		F.	—	—	—	—	—
TOTAL	... ...		53	117	117	16	37

TABLE 71.

CONDITION AT END OF 1934 OF PATIENTS TREATED AT AND DISCHARGED FROM THE BLACKBURN CORPORATION HOSPITAL

Year Discharged	At full work. No Symptoms 1	At full work, but with difficulty 2	Not able to work full time owing to ill health. 3	Not able to work but able to get about 4	Confined to the house 5	Confined to bed 6	Died (not in the Institution at time of first admission). 7	Cannot trace 8	Total.
1915	1	—	—	—	—	—	58	14	73
1916	—	—	—	—	—	—	47	9	56
1917	5	1	2	—	—	—	29	1	38
1918	9	—	3	1	—	—	38	6	57
1919	16	2	2	3	—	—	46	4	73
1920	14	1	1	6	—	—	46	5	73
1921	16	4	2	5	—	—	45	5	77
1922	21	5	5	5	2	—	54	11	103
1923	26	5	3	6	2	1	66	14	123
1924	12	4	—	8	1	—	64	12	101
1925	12	4	3	5	4	1	54	19	102
1926	6	4	3	3	1	—	27	11	55
1927	10	4	2	2	2	1	14	10	45
1928	3	3	2	4	1	2	23	4	42
1929	2	2	3	4	1	—	18	1	31
1930	3	4	5	16	4	1	22	6	61
1931	4	9	13	41	4	—	35	8	114
1932	5	15	24	29	6	—	52	1	132
1933	7	12	9	2	1	1	31	1	64
1934	15	30	21	14	7	5	23	2	117
Total..	187	109	103	154	36	12	792	144	1537
%	12·2	7·0	6·7	10·0	2·3	0·8	51·6	9·4	—

TABLE 72.

CONDITION AT END OF 1934 OF PATIENTS TREATED AT AND DISCHARGED FROM MEATHOP SANATORIUM.

Year Discharged.	At full work. No Symptoms. 1	At full work, but with difficulty 2	Not able to work full time owing to ill health 3	Not able to work but able to get about 4	Confined to the house. 5	Confined to bed. 6	Dead 7	Cannot trace 8	Total.
1915	—	—	—	—	—	—	12	20	32
1916	1	—	—	—	—	—	15	14	30
1917	1	—	—	1	—	—	21	13	36
1918	1	—	2	4	—	—	23	10	40
1919	6	2	1	1	—	—	20	18	48
1920	3	2	1	2	—	—	20	14	42
1921	8	1	2	1	1	1	13	15	42
1922	5	—	—	—	—	—	11	6	22
1923	2	1	3	2	—	—	9	7	24
1924	2	1	—	3	—	—	13	7	26
1925	3	1	1	1	2	1	14	2	25
1926	3	1	—	3	1	—	9	9	26
1927	3	1	1	3	1	1	6	3	19
1928	—	2	2	2	—	—	10	3	19
1929	—	2	2	2	—	—	7	—	13
1930	1	1	2	3	—	—	13	1	21
1931	1	3	2	4	—	—	5	2	17
1932	2	3	2	7	1	—	4	4	23
1933	4	2	1	1	—	—	5	—	13
1934	4	4	2	1	—	1	2	1	15
Total	50	27	24	41	6	4	232	149	533
%	9·6	5·2	4·7	7·8	1·2	0·9	44·0	26·6	—

TABLE 73.

SUMMARY OF DISPENSARY STATISTICS AND OF HOME VISITING.

	1934	1933
Number of persons placed under observation for purpose of diagnosis	146	145
Number of persons for whom the period of observation exceeded two months	34	30
Number of visits paid by the Tuberculosis Officer to the homes of patients	90	82
Number of visits paid by Nurses to the homes of patients for dispensary purposes	2333	2253
Number of attendances of patients at the Dispensary :—		
Insured	3081	2969
Not Insured	1440	1264
Total	4521	4233
Number of patients under Domiciliary Treatment :—		
Pulmonary	177	167
Non-Pulmonary	51	47
Total	228	214
Number of reports received from practitioners in respect of patients on Domiciliary Treatment	79	81
Number of specimens of sputum examined in connection with the work of the Dispensary :—		
Positive	125	109
Negative	272	331
Total	397	440
Number of houses disinfected during the year :—		
(i) On removal of patient to Hospital ..	53	61
(ii) On death	24	39
(iii) On changing address..	5	5
Number of Reports made to Local War Pensions Committee by the Tuberculosis Officer on general progress and capacity for work of Tuberculous Discharged ex-Service men	36	38

PART VI.

Venereal Diseases.

VENEREAL DISEASES.

The arrangements for the treatment of Venereal Disease and for the examination of pathological material are the same as in 1933.

(*a*) *The Royal Infirmary Centre :*

Six hundred and eighty one patients, of whom 286 were Blackburn residents, attended this Centre for the first time during the year. Of the Blackburn cases 78 were suffering from gonorrhœa, 29 from syphilis, and 179 from conditions non-venereal.

The appended Table shows the number of new cases seen yearly at the Royal Infirmary since 1925.

Year.	*Male.*	*Female.*	*Total.*
1925	225	131	356
1926	260	144	404
1927	300	103	403
1928	349	291	640
1929	380	251	631
1930	365	265	630
1931	384	269	653
1932	440	267	707
1933	412	210	622
1934	365	315	680

The total number of attendances for all patients was 21,906, 11,826 of which were in respect of Blackburn residents. The aggregate number of in-patient days at the Royal Infirmary was 124 for Blackburn cases, and 322 for cases from other sources.

During the year 116 males and 65 females ceased to attend the Clinic before completion of the full course, and 84 cases, 30 males, and 54 females, discontinued attendance after completion of treatment, but before final tests for cure had been carried out.

(*b*) *The Victoria Street Centre :*

This centre is for the treatment of women maritally infected, and of children congenitally or accidentally infected. The Clinic forms part of the Maternity and Child Welfare Scheme, and all cases referred for treatment have passed through the Welfare Centres.

At the beginning of the year 15 females were under treatment for syphilis and 42 females and one male for gonorrhœa. In the course of the year the following cases were dealt with for the first time :—Gonorrhœa, 28 ; non-venereal conditions, 28. The total number of attendances made was 959.

TABLE 74.

Form V.D. (R) (Revised).

RETURN relating to all persons who were treated at the Treatment Centre at the Royal Infirmary, Blackburn, during the year ended the 31st December, 1934.

	Syphilis		Soft Chancre		Gonorrhœa		Conditions other than Venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
1. Number of cases on 1st January under treatment or observation	132	79	...	...	223	205	10	31	365	315	680
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection... ...	7	5	...	...	18	4	...	...	25	9	34
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from :—											
Syphilis, primary	7	2	...	...	...	...	...	...	7	2	9
,, secondary	..	3	...	...	...	...	...	...	..	3	3
,, latent in 1st year of infection...	..	...	...	...	...	...	...	...	..	...	..
,, all later stages	30	22	...	...	...	...	...	...	30	22	52
,, congenital...	3	8	...	...	...	...	...	...	3	8	11
Soft Chancre	...	...	...	...	...	...	...	...	...	...	...
Gonorrhœa, 1st year of infection	...	...	...	...	113	30	...	...	113	30	143
,, later	...	...	...	...	9	18	...	...	9	18	27
Conditions other than venereal	...	...	...	...	...	...	271	151	271	151	422
4. Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection	2	3	...	...	7	2	...	...	9	5	14
Totals of Items 1, 2, 3 and 4	181	122	...	...	370	259	281	182	832	563	1395
5. Number of cases discharged after completion of treatment and final tests of cure (*see* Item 15)...	17	8	...	...	79	12	259	141	355	161	516
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from :—											
Syphilis, primary	7	1	...	...	...	...	...	...	7	1	8
,, secondary	3	2	...	...	...	...	...	...	3	2	5
,, latent in 1st year of infection...	...	...	...	...	...	...	...	...	...	...	...
,, all later stages	26	6	...	...	...	...	...	...	26	6	32
,, congenital...	..	3	...	...	...	...	...	...	..	3	3

Soft Chancre	...	...	...	...	...	...	...	...	...	...	...
Gonorrhœa, 1st year of infection	...	...	...	...	58	33	...	...	58	33	91
,, later	...	...	...	...	22	20	...	...	22	20	42
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure (*see* Item 15)	12	16	...	...	18	38	...	...	30	54	84
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	3	5	...	...	23	18	...	...	26	23	49
9. Number of cases remaining under treatment or observation on 31st December	113	81	...	...	170	138	22	41	305	260	565
TOTALS OF ITEMS 5, 6, 7, 8 AND 9 ...	181	122	...	...	370	259	281	182	832	563	1395
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment :—											
Syphilis, primary	2	..	...	...	...	...	...	...	2	...	2
,, secondary	2	2	...	...	...	...	...	...	2	2	4
,, latent in 1st year of infection...	...	...	...	...	...	...	...	...	...	..	...
,, all later stages...	8	2	...	...	...	...	...	...	8	2	10
,, congenital...	..	2	...	...	...	...	..	...	..	2	2
11. Number of attendances :—											
(*a*) for individual attention of the medical officers	2797	2534	...	...	3200	2826	540	732	6537	6092	12629
(*b*) for intermediate treatment, *e.g.*, irrigation, dressing	99	...	...	...	8819	359	...	...	8918	359	9277
TOTAL ATTENDANCES	2896	2534	...	...	12019	3185	540	732	15455	6451	21906
12. In-patients :—											
(*a*) Total number of persons admitted for treatment during the year	8	2	...	...	7	4	3	...	18	6	24
(*b*) Aggregate number of "in-patient days" of treatment given	126	23	...	...	174	71	52	...	352	94	446
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.		F.
	1	1	...	1	2	4	...	2	3		8

TABLE 74—*Continued.*

14. Chief preparations used in treatment of Syphilis :—	Arsenobenzene Compounds	Mercury	Bicreol Bismostab Iodoform Bismuthate Quinine Bivatol Stabismol Bismogenal
(*a*) Names of preparations	Neokharsivan, Stabilarsan, Sulfarsenol, Silver Salvarsan, Kharsulphan, Myo-Salvarsan Stovarsol	Pil. Hydrarg. Hyd. c̄ Creta.	
(*b*) Total number of injections given (out-patients and in-patients)	1966	...	2895

15. Are the tests recommended in Memo. V21 as amended by Memo. V21a followed in deciding as to the discharge of the patient after treatment and observation for syphilis and gonorrhœa ?	Yes.
If not, in what way are they modified ? ...	There is no complement fixation test done for Gonorrhœa.

16. PATHOLOGICAL WORK :—	MICROSCOPICAL		SERUM TESTS.		
	for spirochetes	for gonococci	Wassermann	Others for syphilis	for gonorrhœa
(*a*) Number of specimens examined at and by the medical officer of the treatment centre	4	2132	...	...	...
(*b*) Number of specimens from patients attending at the centre sent for examination to an approved laboratory.	...	...	911	...	...

STATEMENT SHOWING THE SERVICES RENDERED AT THE TREATMENT CENTRE DURING THE YEAR, CLASSIFIED ACCORDING TO THE AREAS IN WHICH THE PATIENTS RESIDED.

Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales) to be inserted in these headings	Blackburn	Lancashire									Total
A. Number of cases in Items 3 and 4 from each area found to be suffering from :—											
Syphilis	29	51	...	...	...	...	...	...	...	...	80
Soft Chancre	...	...	...	...	...	...	...	...	...	...	...
Gonorrhœa	78	101	...	...	...	...	...	...	...	...	179
Conditions other than venereal	179	243	...	...	...	...	...	...	...	...	422
TOTAL	286	395	...	...	...	...	...	...	...	...	681
B. Total number of attendances of all patients residing in each area	11826	10080	...	...	...	...	...	...	...	...	21906
C. Aggregate number of " In-patient days " of all patients residing in each area...	124	322	...	...	...	...	...	...	...	...	446
D. Number of doses of arsenobenzeno compounds given in the out-patient Clinic and In-patient Department to patients residing in each area	905	1061	...	...	...	...	...	...	...	...	1966

(*Signed*) DOROTHEA I. BAIRD,
W. CRAN DUTHIE,
Medical Officers of the Treatment Centre.

February 22nd, 1935.

TABLE 75.

FORM V.D. (R) (REVISED).

RETURN relating to all persons who were treated at the Treatment Centre at the HEALTH DEPARTMENT CLINIC, BLACKBURN, during the year ended the 31st December, 1934.

	Syphilis		Soft Chancre		Gonorrhœa		Conditions other than venereal		TOTALS		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
1. Number of cases on 1st January under treatment or observation	...	15	...	...	1	42	...	...	1	57	58
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection... ...	...	...	...	...	...	18	...	...	...	18	18
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from :—											
Syphilis, primary	...	...	...	...	...	...	...	...	...	...	...
,, secondary	...	...	...	...	...	...	...	...	...	...	...
,, latent in 1st year of infection...	...	...	...	...	...	...	...	...	...	...	...
,, all later stages	...	...	...	...	...	...	...	...	...	...	...
,, congenital...	...	...	...	...	...	...	...	...	...	...	...
Soft Chancre	...	...	...	...	...	...	...	...	...	...	...
Gonorrhœa, 1st year of infection	...	...	...	...	...	15	...	...	...	15	15
,, later	...	...	...	...	...	13	...	...	...	13	13
Conditions other than venereal	...	...	...	...	...	...	...	28	...	28	28
4. Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection	...	...	...	...	...	...	...	...	...	...	...
TOTALS OF ITEMS 1, 2, 3 AND 4	...	15	...	...	1	88	...	28	1	131	132
5. Number of cases discharged after completion of treatment and final tests of cure (*see* Item 15)...	...	...	...	...	1	...	...	28	1	28	29
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from :—											
Syphilis, primary	...	...	...	...	...	...	...	...	...	...	...
,, secondary	...	...	...	...	...	...	...	...	...	...	...
,, latent in 1st year of infection...	...	...	...	...	...	...	...	...	...	...	...
,, all later stages	...	2	...	...	...	...	...	...	...	2	2
,, congenital...	...	...	...	...	...	...	...	...	...	...	...

Soft Chancre	...	...	...	...	...	...	...	...	...	...	...
Gonorrhœa, 1st year of infection	...	...	...	...	...	12	...	...	...	12	12
,, later	...	...	...	...	...	9	...	...	...	9	9
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure (*see* Item 15)	...	3	...	...	...	14	...	...	...	17	17
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	...	...	...	...	...	3	...	...	...	3	3
9. Number of cases remaining under treatment or observation on 31st December	...	10	...	...	...	50	...	...	...	60	60
TOTALS OF ITEMS 5, 6, 7, 8 AND 9 ...	...	15	...	...	1	88	...	28	1	131	132
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment :—											
Syphilis, primary	...	...	...	...	...	...	...	...	...	...	...
,, secondary	...	...	...	...	...	...	...	...	...	...	
,, latent in 1st year of infection...	...	...	...	...	...	...	...	...	...	...	...
,, all later stages...	...	1	...	...	...	...	...	...	...	1	1
,, congenital...	...	...	...	...	...	...	...	...	...	...	...
11. Number of attendances :—											
(*a*) for individual attention of the medical officers	...	314	...	...	...	573	...	72	...	959	959
(*b*) for intermediate treatment, *e.g.*, irrigation, dressing	...	...	...	...	...	...	...	...	...	...	...
TOTAL ATTENDANCES	...	314	...	...	...	573	...	72	...	959	959
12. In-patients :—											
(*a*) Total number of persons admitted for treatment during the year	...	...	...	...	...	...	...	...	...	...	...
(*b*) Aggregate number of "in-patient days" of treatment given	...	...	...	...	...	...	...	...	...	...	...

	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		TOTALS.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods	...	...	...	..	...	...	...	...	...	...

TABLE 75—*Continued.*

14. Chief preparations used in treatment of Syphilis :—	Arsenobenzene Compounds	Mercury	Bismuth
(*a*) Names of preparations	Neokharsivan, Sulfarsenol	Pil. Hydrarg. Hyd. c̄ Creta.	Bicreol.
(*b*) Total number of injections given (out-patients and in-patients)	118	...	135

15. Are the tests recommended in Memo. V21 as amended by Memo. V21a followed in deciding as to the discharge of the patient after treatment and observation for syphilis and gonorrhœa ?	*Primary syphilis.*—If blood negative to begin with patient discharged ; if blood negative for two years from commencement of treatment without return of symptoms.
If not, in what way are they modified ? ...	*Secondary syphilis.*—After provocative dose of arsenobenzol and if blood negative two years after treatment ceased. *Gonorrhœa :* Discharged after three successive smears from Urethra and Cervix after menstrual period and provocative vaccine.

16. Pathological Work :—	Microscopical		Serum Tests		
	for spirochetes	for gonococci	Wassermann	Others for syphilis	for gonorrhœa
(*a*) Number of specimens examined at and by the medical officer of the treatment centre	...	...	...	...	...
(*b*) Number of specimens from patients attending at the centre sent for examination to an approved laboratory.	...	270	70	...	...

STATEMENT SHOWING THE SERVICES RENDERED AT THE TREATMENT CENTRE DURING THE YEAR, CLASSIFIED ACCORDING TO THE AREAS IN WHICH THE PATIENTS RESIDED.

Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales) to be inserted in these headings	Blackburn	Oswaldtwistle	Accrington								Total
A. Number of cases in Items 3 and 4 from each area found to be suffering from :—											
Syphilis	..	...	...	...	...	...	...	...	...	...	...
Soft Chancre	...	...	...	...	...	...	...	...	...	...	...
Gonorrhœa	27	...	1	...	...	...	...	...	...	...	28
Conditions other than venereal	27	1	...	...	...	...	...	...	...	...	28
TOTAL	54	1	1	...	...	...	...	...	...	...	56
B. Total number of attendances of all patients residing in each area	957	1	1	...	...	...	...	...	...	...	959
C. Aggregate number of " In-patient days " of all patients residing in each area	...	...	...	...	...	...	...	...	...	...	...
D. Number of doses of approved arsenobenzene compounds given in the out-patient Clinic and In-patient Department to patients residing in each area	118	...	...	...	...	...	...	...	...	...	...

(*Signed*) DOROTHEA I. BAIRD,
Medical Officer of the Treatment Centre.

28th January, 1935.

BLACKBURN ROYAL INFIRMARY—V.D. Beds: Male 2; Female 2.

PARTICULARS OF STAFF.

	Duties.	If Employed Whole or Part-Time on Duties in V.D. Centre.
Medical Officers—		
Dr. W. Cran Duthie.	In charge of Male clinic.	Part-time.
Dr. D. I. Baird	In charge of Female clinic..	Part-time.
Resident Medical Officers ..	Assist at male clinics	Part-time.
Nurses—Two	To prepare for and assist at clinics .. .. Do irrigations, &c., and keep registers	One whole time. One at female clinic only.
Male Attendants—Two ..	To prepare for and assist at male clinics. Do irrigations, &c., and general porter's work in connection with clinics.	One nearly whole-time and evenings and week-ends and one at clinics only.
Dispenser—One	General Dispensing duties	Four clinics per week.
Clerk	Preparation of statistical returns and general clerical duties	Part-time.

Patients from Blackburn attended the following centre for treatment during the year :—

	Gonorrhœa.	*Non-Venereal*	*Syphilis.*
Preston	3	... ...	1

PART VII.

Maternity and Child Welfare.

ANTE-NATAL WORK.

An Ante-Natal Clinic is conducted twice weekly, particulars of which will be found in the appended Table :—

TABLE 76.

No. of Sessions held	99
No. of Attendances made	2672
No. of Individuals	775
No. of Normal Labours	420
No. of Abnormal Labours	74
No. Non-pregnant	117
No. Undelivered at End of 1934	164
Sent by Health Visitors	121
Sent by Matron, Springfield	216
Sent from Various Sources...	125
Sent by Doctors	77
Sent by Midwives	47
Women who came on their own initiative	189
Primigravidæ Examined	265
Multigravidæ Examined	393
Multigravidæ undelivered at end of year	118
Primipara undelivered at end of year	46

The 74 abnormal cases were as follows :—

Instrumental	16	Footling	1
Stillbirths	20	Occipito-Posterior	4
Cæsarean Section	2	Miscarriage	4
Premature Births	11	Twins	5
Breech	11		

Increased use has been made of the facilities available at the Ante-Natal Clinic, although only a small proportion of cases are referred by midwives.

That the general public appreciate the importance of medical supervision during the ante-natal period is shown by the fact that year by year more women place themselves under the care of private or clinic doctors during the expectant period. There is a steadily increasing number of attendances by women who seek advice on their own initiative, or on advice of their friends. The majority of women who attend the Clinic do so from an early stage of pregnancy, the average duration of pregnancy on first attendance being 4½ months.

Of women who attended the Clinic and were found to be pregnant, 40% were primigravidæ.

The Committee are aware that the attendances at the Ante-Natal Clinics have become so heavy that it is difficult for the staff to exercise that close supervision which is all essential. Shortage of personnel prevents duplication of the existing sessions, and the position can be met only by staff increase.

Post-natal examination forms an integral part of any maternity scheme. The fact that staff shortage, coupled with increasing attendances at both the Child Welfare and Ante-Natal Clinics prevents any systematic post-natal work being carried out is a matter which warrants your attention.

SUPERVISION OF MIDWIVES.

This work is undertaken by the Lady Assistant Medical Officer of Health, assisted by the Senior Health Visitor, who pays periodical visits to the homes of the midwives.

Thirty-eight midwives notified their intention to practise within the Borough during 1934. Ten of these are attached to the District Nurses' Home. All are trained midwives and hold the Certificate of the C.M.B. by examination.

During the year the name of one midwife was removed from the Register, and four left the Borough, leaving 33 on the register on 31st December, 1934.

One hundred and fifty visits were paid to the midwives by the Senior Health Visitor, of which 103 were effective and 47 ineffective.

On the occasion of each visit the inspector scrutinises all records required to be kept by the Central Midwives' Board, and bags and appliances are examined. Attention is also given to the home hygiene of the midwife, which in all cases has been found satisfactory.

The following notifications required under the rules of the Central Midwives' Board were received :—

Notifications of	still birth	15
,,	laying out dead body	1
,,	deaths in practice	11
,,	having advised artificial feeding ...	14
,,	liability to be a source of infection ...	4
	TOTAL ...	45

Bags are equipped according to the requirements of the Central Midwives' Board, and all have detachable, washable linings.

Ante-Natal Care. Many of the midwives have shown a keener interest in this branch of their work, although the keeping of the Ante-Natal Record Book is not always satisfactory.

DOCTORS' ACCOUNTS UNDER SECTION 14 (1) OF THE MIDWIVES ACT, 1918.

One hundred and ninety-one accounts were received from doctors for services rendered to patients to whom they had been called in an emergency by a qualified midwife.

This compares with 206 in 1933, 186 in 1931, and 230 in 1932. The total amount of the accounts was £229 13s. 6d. The Sub-Committee assessed the amounts recoverable from the patients at £130 5s. 3d., and £109 19s. 7d. was actually paid by patients during the year.

REASONS FOR SENDING FOR MEDICAL ASSISTANCE.

CONDITIONS ASSOCIATED WITH :—

(*a*)	Pregnancy	58
(*b*)	Labour	336
(*c*)	Puerperium	31
(*d*)	Baby	69
(*e*)	Various	5
		499

SPRINGFIELD MUNICIPAL MATERNITY HOME.

Three hundred and sixty-seven cases were admitted during the year, being 23 more than in 1933.

Number of Maternity Beds in the Institution	19 and 1 isolation bed
Number of Maternity Cases admitted during the Year	367
Average Duration of Stay	14 Days
Number of Cases Delivered by :—	
(*a*) Midwives	268
(*b*) Doctors	53
Number of Cases in which Medical Assistance was sought by a Midwife in Emergency	70

28 for distress of mother or child ;
42 Ruptured perineum.

Number of Cases Notified as :—	
(*a*) Puerperal Fever	1
(*b*) Puerperal Pyrexia	5
Number of Cases of Pemphigus Neonatorum	*Nil*
Number of Infants not entirely Breastfed while in the Institution 5 Supplemented temporarily (three or four days) ; 4 Wholly artificially fed.	9
Number of Cases Notified as Ophthalmia Neonatorum	*Nil*
Number of Maternal Deaths	*Nil*
Number of Infant Deaths :—	
(i) Stillborn	9
(ii) Within Ten Days of Birth	2

Cause of Death in each Case, and results of Post-Mortem Examination (if obtainable) :—

Within 10 *days*—

Premature infant, very rapid delivery, cerebral injury.
Anencephalic meningocele (lived two days).

Stillborn—

Placenta Prævia, severe A.P.H.	2
Forceps delivery, (?) Cerebral injury	1
Asphyxia Neonatorum (Breech Presentations and Uterine Inertia)	2
Prolapsed Cord	1
Complete deformity with contraction of whole of right side	1
Hydrocephalic Spina-bifida	1
Macerated fœtus	1

Although no maternal deaths took place in Springfield during the year, a Springfield patient died at the Royal Infirmary following transfer there for puerperal septicæmia.

Cervical and uterine swabs from this case both contained hæmolytic streptococci, and the patient's blood culture showed a profuse growth of that organism.

Careful examination of members of the Springfield staff yielded no clinical evidence as to a possible source of infection. Nose and throat swabs were taken from all who had been in contact with the patient, and two members of the nursing staff were found to be carriers of the causal organism. These nurses were released from duty pending negative bacteriological reports.

Five cases of puerperal pyrexia occurred in Springfield during the year, each of which was bacteriologically investigated with negative results.

The occurrence of scarlet fever in an open ward of a maternity home creates a situation fraught with grave possibilities. In February of the year under review a patient was admitted to a ward shared by four other women, and was delivered on the day of admission. The following day she developed scarlet fever, and was removed to the Isolation Hospital forthwith. Administrative procedure was adopted as under :—

(1) Separate staff was allotted to the infected ward, which was " barriered " until all cases were discharged therefrom.

(2) Infected bedding, utensils, etc., were steam sterilised at once, and the ward was re-disinfected following discharge of the patients.

(3) All contacts received prophylactic Anti-Scarlatinal Serum.

(4) Staff contacts were swabbed for investigation qua hæmolytic streptococci. Two of the staff, who were thus ascertained to be carriers, were released from duty until certified free.

(5) Patients and staff were kept under close medical observation for a period of eight days, as from last date of " in contact."

No secondary cases of scarlet fever occurred in the home, nor did any of the patients develop either septicæmia or pyrexia.

PUERPERAL FEVER & PUERPERAL PYREXIA.

(*a*) *Puerperal Fever :—*

Eight notifications were received during the year, two of which, in respect of out-of-the-Borough cases, were not investigated. Three cases (one extra-Borough resident and two Blackburn residents) terminated fatally.

No. of cases notified	8
Borough cases	6
Out of Borough cases	2
No. of cases attended by midwife alone	2
No. of cases attended by a doctor and midwife	2
No. of cases attended in an Institution	4
No. of cases treated in Hospital	8
No. of cases which recovered...	5

(*b*) *Puerperal Pyrexia* :—

Thirteen cases, all of which recovered, were notified during the year.

No. of cases notified ...	13
Borough cases ...	13
No. of cases attended by Doctor alone	0
No. of cases attended by Midwife alone	2
No. of cases attended by Doctor and Midwife	1
No. of cases attended in Institution...	10
No. of cases treated at Home	1
No. of cases treated in Hospital	12
No. of cases attended by District Nurse	1
No. of cases which recovered...	13
No. of cases treated in Private Maternity Home	0

Specialist opinion, in cases of puerperal fever and puerperal pyrexia is available on request to the Medical Officer of Health. Examination of pathological material in connection with these cases is carried out at the Public Health Laboratories in Manchester and Liverpool.

No difficulty has been experienced in securing early hospitalisation of cases of puerperal infection, as beds are available at the Royal Infirmary, the Corporation Hospital and the Queen's Park Hospital.

MATERNAL MORTALITY.

During the year a total of 22 deaths occurred in association with pregnancy, of which number nine were in respect of Blackburn residents. The certified causes of the latter deaths are classified below :—

(1) (*a*) Pernicious anæmia ; (*b*) enteritis ; (*c*) Confinement.

(2) (*a*) Septicæmia ; (*b*) Puerperal Fever.

(3) Sapræmia and pleurisy, due to an abortion (natural causes).

(4) (*a*) Cardiac embolism ; (*b*) Parturition and retained placenta.

(5) Severe toxæmia, producing acute yellow atrophy of the liver and massive hæmorrhage into the wall of the uterus.

(6) Accidental hæmorrhage.

(7) (*a*) Auricular fibrillation ; (*b*) Toxic myocarditis ; (*c*) Puerperal Fever.

(8) (*a*) Acute intestinal obstruction ; (*b*) old adhesions ; (*c*) Previous salpingectomy.

(9) Post partum hæmorrhage.

Based on the above deaths, the total maternal mortality rate during 1934 was 5·95 per 1,000 births and still-births.

In the above series deaths numbered (1) and (8) may be excluded, as they were not directly due to pregnancy and child-bearing. The direct maternal mortality rate, therefore, was one of 4·63 per 1,000 live and still-births.

The death-rate from sepsis was 1·98 per 1,000, and that from other conditions directly due to child-bearing was 2·64.

Analysis of the nine maternal deaths shows a wastage of maternal life which was possibly avoidable :—

Case I. That of a woman who died of pernicious anæmia and enteritis, following confinement.

The physical condition of this woman was such as unfitted her for pregnancy and confinement.

This case was admitted to Queen's Park Hospital for ante-natal treatment of anæmia and enteritis, and was self-discharged after twelve days treatment.

Case II. A death from accidental hæmorrhage.

This woman had booked neither doctor nor midwife, nor did she receive any ante-natal supervision.

Midwife called only when onset of full-term labour was ushered in with copious hæmorrhage.

Case III. A death following abortion.

The abortion was incomplete and the woman concerned refused hospitalisation until almost moribund.

As instructed by the Maternity and Child Welfare Sub-Committee, I presented to them a Report upon the local maternal mortality.

A careful survey of the services provided by the Corporation showed only one obvious deficiency, and that, at present, beyond the control of the Local Authority. I refer to the fact that no obstetric consultant is available for the assistance of private practitioners. The Health Committee have been for long conscious of this gap in their organisation, though efforts to make good the omission have as yet been unsuccessful. Although Blackburn is well-served through the Royal Infirmary with a wide range of specialist services, there is no practitioner in the Borough who has made a speciality of, and applied himself to, the practice of midwifery. Further action in the matter has been proposed and, notwithstanding undoubted difficulties, it is hoped that a suitable appointment will shortly be made.

Arising out of the Report the Council have approved a scheme for the provision of dinners to expectant mothers, selected on medical grounds. It is not proposed to distribute the meals through a depot, or depots, but arrangements have been made for the mothers to be fed at restaurants in various parts of the town. The dinners are to be supplied at a cost to the Health Department of 8d. per meal, and the amount to be recovered from the recipient will be based upon her financial circumstances.

The Council also propose that each year a certain number of midwives in independent practice shall undergo a course of clinical instruction at a teaching hospital, expenses to be borne by the Health Committee. This scheme is supplementary to the yearly series of post-graduate lectures arranged by the Council, and open to all midwives in the town. Midwives will be selected for the course jointly by representatives of the Health Committee and of the Midwives' Association.

The Council have also approved arrangements whereby a laboratory investigation of certain bio-chemical and bacteriological aspects of pregnancy will be carried out. In this connection the best thanks of the Committee are due to Dr. Jeffrey Ramsay, Honorary Pathologist to the Royal Infirmary, for his promised and honorary collaboration with this department in the investigation.

Although the Local Authority have already made comprehensive provision for maternal welfare, and are at present engaged in extending the scope of their scheme, a dramatic reduction in maternal mortality will not necessarily follow their efforts.

The problem of maternal mortality is one of complexity, in which a combination of many factors play their part. Many of the deaths associated with pregnancy are unavoidable, others, again, are capable of prevention. A higher standard of midwifery practice and the services of an obstetric consultant should contribute to some reduction in the latter group. It should be clearly stated that many preventable deaths which occur locally are due neither to inefficient midwifery, nor to lack of facilities, whether provided by the Local

Authority, Voluntary Hospitals, or private agencies. Enquiry into the mortality and morbidity of pregnancy shows that a considerable proportion of the tragedies are due to failure of the mother to avail herself of the facilities offered. Approximately 10 per cent. of the deaths which have occurred in Blackburn during the past six years might have been prevented had the mother appreciated her own obligations. Five of the deaths (from toxæmia) were attributable in three cases to a complete absence of ante-natal care, and in two cases to the mother neglecting the advice of the ante-natal attendant.

Another avoidable death followed illegal and instrumental induction of abortion. As regards instrumental termination of pregnancy, there is no evidence to show that the practice is prevalent locally, but we have reason to believe that it has become less common during the past four or five years. It is not improbable, however, that self-administration of abortifacients is on the increase.

Three other deaths (described on page 152) were possibly preventable.

In scrutinising the maternal mortality figures for the Borough one is impressed by the relatively high proportion of mothers who have died from " Associated Conditions," that is to say, from causes not directly attributable to child-bearing, but to pre-existing morbid conditions. Of 57 deaths investigated, 19, or 33·3% of the total, were due to such causes. They occurred in women who, by reason of such conditions as heart or kidney disease, tuberculosis, etc., were physically unfitted for the strain of pregnancy and parturition, and should never have been exposed to the risks associated with conception. Such women attending the Centres are warned of the special dangers to them of future pregnancy, although advice as to methods of avoiding pregnancy is not available under your maternity scheme.

TABLE 77.

MATERNAL MORTALITY

Rates per 1,000 Births and Stillbirths Registered.

YEAR	SEPSIS	OTHER CAUSES	TOTAL	YEAR	SEPSIS	OTHER CAUSES	TOTA
1891	1·71	2·70	4·41	1913	1·02	4·46	5·48
1892	2·31	4·64	6·95	1914	2·14	4·28	6·42
1893	0·51	4·38	4·89	1915	1·22	2·03	3·25
1894	0·55	5·24	5·79	1916	1·93	1·93	3·86
1895	1·79	5·89	7·68	1917	0·61	5·53	6·14
1896	1·40	7·03	8·43	1918	1·29	5·80	7·09
1897	1·92	2·75	4·67	1919	2·72	3·28	6·00
1898	0·54	3·00	3·54	1920	1·06	4·59	5·65
1899	2·19	3·29	5·48	1921	2·37	1·97	4·34
1900	2·90	1·16	4·06	1922	0·45	6·43	6·88
1901	2·65	3·54	6·19	1923	2·39	4·29	6·68
1902	3·27	4·73	8·00	1924	1·51	3·53	5·04
1903	1·50	6·05	7·55	1925	2·10	3·68	5·78
1904	0·96	4·19	5·15	1926	4·01	4·01	8·02
1905	3·13	6·57	9·60	1927	1·76	5·87	7·63
1906	1·46	3·80	5·26	1928	0·58	3·46	4·04
1907	3·58	5·07	8·65	1929	1·93	7·72	9·65
1908	0·58	4·09	4·67	1930	0·00	4·38	4·38
1909	2·23	4·14	6·37	1931	0·64	3·24	3·88
1910	2·71	4·41	7·12	1932	0·64	5·18	5·83
1911	1·75	5·60	7·35	1933	0·00	4·11	4·11
1912	1·09	3·28	4·37	1934	1·98	4·63	5·95
Average	1891—	1900	..	..	1·58	4·00	5·59
	1901—	1910	..	..	2·20	4·65	6·85
	1911—	1920	..	..	1·48	4·07	5·56
	1921—	1930	..	..	1·71	4·53	6·24

NOTIFICATION OF BIRTHS.

The following Table illustrates the source of notifications during the year :—

	Live Births	*Still Births*	*Total*
Doctors	30	9	39
Midwives	1275	59	1334
Parents and others	238	14	252
Totals	1543	82	1625

STILL BIRTHS.

The number of still-births allocated to the Borough during the year was 70, of which number 59 occurred in the practices of midwives.

All still-births are investigated with a view to ascertainment of cause. The appended Table gives particulars with reference to possible and probable causes :—

Cause.	*No. of Still-births.*
(1) Complications of labour	16
(2) Ante-Natal Causes (including Toxæmia and Syphilis)	14
(3) Fœtal States (excluding Syphilis)	7
(4) Prematurity	6
(5) Unascertained	27
	70

NEO-NATAL DEATHS.

During the year 63 infants died within two months of birth ; 12 of the deaths were ascribed to fœtal states, 29 to prematurity, and the remainder to post-natal causes.

The number of neo-natal deaths (*i.e.*, within the first four weeks of life) was 58, a figure equivalent to 4·0% of live births registered (1441).

PREMATURE BIRTHS.

All premature births are followed up, and of 70 premature infants born during 1934, 39 or 55·7% were alive at the end of the year.

Causes of prematurity :

Albuminuria...	3
Ante partum hæmorrhage ...	4
Multiple pregnancy	3
Shock	1
Not known ...	48
Other Maternal conditions	10
Hydramnios	1

INFANTILE MORTALITY.

During the year there were 82 deaths of infants, compared with 104 in 1933. This figure corresponds to an infantile mortality rate of 56·9 per 1,000 live births registered, compared with 71·3 in 1933, and 66·7 in 1932.

Of the deaths registered, 77 were of legitimate, and five of illegitimate children. The rate of infantile mortality amongst legitimate infants was 56·2 per 1,000 legitimate births registered, and amongst illegitimate children, 70·0 per 1,000 illegitimate births registered.

Of the deaths certified 58, or 70·7%, occurred within the first month of life.

The more important causes of death were as follows :—

Cause.	*Number of Deaths.*
Premature Birth ...	25
Congenital defect...	18
Pneumonia	7
Debility, etc.	10

St. Matthew's Ward shows the highest rate of infantile mortality (141), followed by St. Mary's (103), and St. John's (93). St. Silas' exhibited the lowest rate (16).

Taking the Infantile Mortality over a period of ten years, St. Silas's shows by far the best figures, St. Andrew's comes next, followed by St. Stephen's. The worst wards during the same period were St. Mary's, St. Peter's and Trinity.

TABLE 78.

INFANTILE MORTALITY IN WARDS AND COMPARISON WITH DENSITY OF POPULATION.

WARD	Estimated Population middle of 1934	Persons per Acre	Rooms per person	Births	Birth Rate	Infantile Mortality	Deaths	Death Rate	Natural Incre'se or Decrease of Popul'n 1933-34	Census Population 1931
St. Stephen's ..	12911	11·2	1·19	210	16·2	57	157	12·1	+53	13215
Trinity	7840	53·4	1·09	75	9·5	26	97	12·3	—22	8022
St. Michael's ..	8392	13·7	1·24	96	11·4	62	123	14·6	—27	8580
St. John's	6366	64·5	1·22	64	10·0	93	81	12·7	—17	6520
St. Silas's	8896	9·2	1·55	59	6·6	16	104	11·7	—45	9108
St. Paul's	8715	72·5	1·20	137	15·7	43	120	13·7	+17	8929
St. Peter's	6078	46·7	1·01	89	14·6	45	75	12·3	+14	6213
St. Mary's ..	5035	29·5	0·94	68	13·5	103	89	17·6	—21	5147
St. Matthew's ..	8368	81·0	1·11	78	9·3	141	119	14·2	—41	8561
St. Thomas' .	10993	6·4	1·06	103	9·3	48	135	12·2	—32	11255
Park	8847	13·9	1·09	135	15·2	44	107	12·0	+28	9052
St. Luke's .. .	7156	43·6	1·08	102	14·2	78	110	15·3	— 8	7333
St. Mark's	9746	24·7	1·25	97	9·9	20	134	13·7	—37	9979
St. Andrew's ..	10537	9·4	1·09	128	12·1	47	130	12·3	— 2	10783
	119880	16·0	1·17	1441	12·0	56	1581	13·1	—140	122697

COMPARISON OF BLACKBURN INFANTILE MORTALITY RATE WITH THAT OF ENGLAND AND WALES FROM 1925—1934.

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Blackburn..........	97	89	77	80	80	83	61	66	71	57
England and Wales..	75	70	69	65	74	60	66	65	64	59

The local infantile mortality rate for 1934 is the lowest yet recorded in the Borough.

TABLE 79.

INFANTILE MORTALITY IN WARDS FROM 1925 TO 1934.

Ward.	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	Average for 10 y'rs
St. Stephen's	65	130	45	47	62	36	62	98	67	57	66
Trinity	101	62	153	118	96	80	76	84	56	26	85
St. Michael's	80	78	46	65	108	95	34	54	38	62	66
St. John's	61	66	52	108	99	109	81	43	22	93	73
St. Silas's	29	67	41	53	63	59	40	38	41	16	44
St. Paul's	107	83	59	73	110	56	74	69	45	43	71
St. Peter's	105	104	119	127	116	103	100	122	134	45	107
St. Mary's...	188	158	97	77	126	205	65	108	90	103	121
St. Matthew's	65	106	41	105	39	68	72	63	63	141	76
St. Thomas's	84	53	76	77	103	128	60	18	104	48	75
Park	118	75	80	81	58	50	38	45	97	44	68
St. Luke's...	118	92	147	111	44	60	56	37	82	78	82
St. Mark's...	122	99	61	51	71	96	31	104	83	20	73
St. Andrew's	110	75	68	60	56	71	61	21	62	47	63
Borough	97	89	77	80	80	83	61	66	71	56	76

TABLE 80.—DEATHS UNDER ONE YEAR, ARRANGED ACCORDING TO DAYS, WEEKS AND MONTHS.

Causes of Death.	1st day.	2nd day.	3rd day.	4th day.	5th day.	6th day.	7th day.	1st week.	2nd week.	3rd week.	4th week.	Under 1 month.	1 month to 2.	2 months to 3.	3 months to 4.	4 months to 5.	5 months to 6.	6 months to 7.	7 months to 8.	8 months to 9.	9 months to 10.	10 months to 11	11 months to 12	Total.
All Causes { Certified	19	5	5	6	3	1	–	39	10	6	–	55	5	2	5	–	5	–	2	1	2	1	1	79
All Causes { Uncertified...	3	–	–	–	–	–	–	3	–	–	–	3	–	–	–	–	–	–	–	–	–	–	–	3
Smallpox	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chickenpox	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Measles	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Scarlet Fever	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Whooping-cough	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	1
Diphtheria and Croup	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Erysipelas	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tuberculous Meningitis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1	2
Abdominal Tuberculosis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other Tuberculous Diseases	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Meningitis (*not Tuberculous*)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	1
Convulsions	–	1	–	–	–	–	–	1	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1
Laryngitis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bronchitis	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	1	–	3
Pneumonia (*all forms*)	–	–	–	1	–	–	–	1	–	–	–	1	1	–	1	–	1	–	–	–	–	–	–	4
Diarrhœa	–	–	–	–	–	–	–	–	2	1	–	3	1	–	–	–	1	–	1	1	–	–	–	7
Enteritis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gastritis	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	1
Syphilis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Rickets	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Suffocation, overlying	1	–	–	–	–	–	–	1	–	1	–	2	–	–	–	–	1	–	–	–	–	–	–	3
Injury at birth	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Atelectasis	1	1	–	–	–	–	–	2	1	–	–	3	–	–	–	–	–	–	–	–	–	–	–	3
Congenital Malformations	8	2	1	2	1	–	–	14	–	1	–	15	–	–	2	–	1	–	–	–	–	–	–	18
Premature Birth	10	1	4	2	1	1	–	19	5	1	–	25	–	–	–	–	–	–	–	–	–	–	–	25
Atrophy, Debility and Marasmus ...	–	–	–	1	1	–	–	2	2	2	–	6	2	1	–	–	–	–	–	–	1	–	–	10
Other causes	2	–	–	–	–	–	–	2	–	–	–	2	–	–	1	–	–	–	–	–	–	–	–	3
Total	22	5	5	6	3	1	–	42	10	6	–	58	5	2	5	–	5	–	2	1	2	1	1	82

Nett Births registered during the calendar year ... { legitimate 1370
{ illegitimate ... 71

Nett Deaths registered during the calendar year of { legitimate infants 77
{ illegitimate infants ... 5

TABLE 81.

DEATH RATES UNDER ONE YEAR OF AGE.

Cause of Death.	Rates per 1,000 Births.												
	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Small-pox	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0
Chicken-pox	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0
Measles	2·7	0·9	0·5	4·2	0·5	3·5	0·0	0·0	3·7	0·6	0·0	4·1	0·0
Scarlet Fever	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0
Whooping-cough	1·8	2·3	2·0	2·1	3·4	0·0	1·1	1·2	1·2	5·2	3·8	1·3	0·6
Diphtheria and Croup	0·0	0·0	0·0	0·0	0·5	0·0	0·0	0·0	0·6	0·0	0·0	0·6	0·0
Erysipelas	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·6	0·6	0·0
Tuberculous Meningitis ...	0·4	0·4	0·5	0·0	0·5	0·0	0·0	0·6	0·0	0·6	0·6	0·0	1·3
Abdominal Tuberculosis ...	0·4	0·0	0·5	0·5	0·5	0·0	0·5	0·0	0·0	0·0	0·6	0·0	0·0
Other Tuberculous Diseases...	0·0	0·0	0·0	0·0	0·5	0·0	0·0	0·6	0·0	0·6	0·0	0·6	0·0
Meningitis (*not Tuberculous*)...	2·3	0·9	1·0	2·1	2·2	0·5	1·7	1·9	0·0	1·3	0·0	0·6	0·6
Convulsions	4·5	4·3	5·0	5·2	2·2	2·9	2·8	4·5	5·0	1·9	0·6	2·7	0·6
Laryngitis	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0
Bronchitis	5·9	7·1	7·0	12·0	8·6	6·4	10·3	8·3	3·7	3·2	4·5	2·7	2·0
Pneumonia (*all forms*)	12·8	12·4	12·6	13·1	13·2	11·7	9·8	15·4	12·5	13·6	7·1	10·9	2·7
Diarrhœa	3·2	4·3	5·5	4·7	4·0	7·0	1·7	2·5	3·7	5·2	1·2	1·3	4·8
Enteritis	4·1	4·8	0·0	0·5	1·1	0·0	0·5	0·0	0·6	0·0	0·6	4·1	0·0
Gastritis	1·8	0·9	3·0	1·0	1·7	1·7	0·0	0·0	0·0	0·6	0·0	0·6	0·6
Syphilis	0·9	2·8	2·0	2·6	0·0	0·0	2·3	0·6	0·0	0·0	0·0	0·0	0·0
Rickets	0·9	0·4	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0
Suffocation, overlying	0·4	0·4	0·0	0·0	0·0	0·5	0·5	0·6	1·8	0·0	0·6	0·0	2·0
Injury at Birth	1·3	0·4	0·0	0·0	0·0	0·0	0·5	0·0	0·0	0·0	0·0	0·0	0·0
Atelectasis	0·4	0·9	0·5	0·5	0·0	2·3	0·0	0·6	1·2	1·3	0·0	1·3	2·0
Congenital Malformations ...	4·5	10·5	3·5	5·7	5·7	3·5	0·5	2·5	10·6	5·2	9·7	11·6	12·5
Premature Birth	25·7	25·3	15·6	20·5	23·5	14·7	16·1	20·6	22·5	13·6	22·6	15·1	17·3
Atrophy, Debility and Marasmus	14·2	10·9	10·6	8·6	14·3	17·0	21·9	13·5	11·2	3·2	7·7	6·9	6·9
Other causes	9·6	9·5	14·1	13·6	6·3	4·7	8·6	6·4	4·3	4·5	5·1	5·4	2·0

OPHTHALMIA NEONATORUM.

Eight cases were notified during the year, seven of which were Borough cases, and one out-of-the-Borough case.

TABLE 82.

Results of Treatment.

Cases Treated.			Vision Unimpaired	Vision Impaired	Total Blindness	Deaths.
Notified	At Home.	In Hospital				
8	3	5	8	—	—	1

MATERNITY AND CHILD WELFARE CENTRES.

There are six Maternity and Child Welfare Centres in the Borough, situated at Bent Street, Nova Scotia, Kendal Street, Griffin Parochial Hall, Cornelian Street and Hozier Street. Two sessions are held each week at Hozier Street and Kendal Street.

In the following Table it will be noted that the attendances numbered 36,974.

The average weekly attendances approximate to those for the previous year, as do the number of consultations with the doctor.

TABLE 83.

	Bent Street.	Hozier Street (2 sessions weekly).	Bolton Road	Kendal Street (2 sessions weekly).	Griffin.	Cornelian Street	Total, 1934.	Total, 1933.	Total, 1932
Infants :—									
New cases under 1 year	129	204	173	237	152	80	975	..	..
No. of re-attendances..	2441	3278	2783	3650	2500	1307	15959	..	..
New cases over 1 year..	44	36	63	64	30	11	248	..	..
No. of re-attendances..	2945	4642	3138	3562	2545	2025	18857	..	..
Attendances of Infants	5559	8160	6157	7513	5227	3423	36039	..	..
Consultations with Dr.	492	1276	975	1463	782	291	5279	..	..
Expectant Mothers—									
No. of new cases ..	43	24	31	32	22	10	162	..	..
No. of re-attendances	214	168	134	129	87	41	773	..	..
Total Attendances of Expectant Mothers..	257	192	165	161	109	51	935	..	..
Total Attendances.. ..	5816	8352	6322	7674	5336	3474	36974	..	..
Average Attendance per session 1934	120	84	125	78	104	72	*750	..	..
1933	..	..	..	..	..	..	..	*772	..
1932	..	..	..	..	..	..	..	..	*736

* Total average attendance *each week* at all the Centres.

A doctor attends at each session, together with two Health Visitors, and assistance is given by three or four voluntary workers. To these ladies I wish to express my thanks for the enthusiastic manner in which they have performed their self-imposed duties.

Of the 1,441 live births notified during the year, 975, or 67·6%, attended the Infant Consultation Centres, a decrease of 1·8% over the figure for 1933.

That there has been no increase in the attendances at the Clinics is not due to waning appreciation of the mothers, but to the prevalence of infectious disease, notably chicken-pox, whooping-cough, and scarlet fever amongst the infants. Another factor which acted as a deterrent was the epidemic of scarlet fever which visited the Borough in February and March ; through fear of exposing their children to possible infection in a crowded clinic, many mothers declined to attend the Centres. Similarly the outbreak of small-pox adversely affected attendances, notably at Hozier Street, where discovery of contacts amongst those attending reduced an attendance of approximately 100 per session to one of approximately 40. Extra health visitors were drafted to the area served, and, after six weeks of keen following up, attendances rose, although the average for the year at this Centre has fallen by almost 14 per cent.

The percentages seen by a Doctor at each session per Clinic are as under :—

Bent Street	9·0
Hozier Street	15·6
Nova Scotia	15·8
Kendal Street	19·0
Griffin	14·9
Cornelian Street	8·5

The talks by Health Visitors at the Clinics have been continued. The syllabus is as under :—

I. Expectant Motherhood. II Care of the New-Born Infant. III The Diet of a Nursing Mother. IV Breast Feeding. V Artificial Feeding. VI Weaning. VII The Hygiene of Infancy. VIII Baby Clothes. IX The Development of the Child. X Feeding from 1–5 Years. XI Rickets. XII Common Ailments of Infancy.

The appended Table shows the deaths of babies who attended the Clinics during their first year, as compared with the deaths of those who never attended the Clinics.

TABLE 84.

Area	Deaths	Attend'd a Clinic		Attendance at Birth			FullTime Baby		Births during same period.	Deaths in Institutions			
		Yes	No	Doctor	Mid-wife	Doctor & Mid-wife	Yes	No		Queens Park	Royal Infir-mary	Spring field	Reg. Mat. Home
District I.	22	6	16	1	13	8	14	8	263	4	2	1	1
,, II.	10	2	8	1	2	7	9	1	229	2	..	..	2
III.	12	3	9	..	4	8	9	3	259	..	2	..	..
,, IV.	9	2	7	..	3	6	5	4	113	4	..	..	..
,, V.	11	1	10	4	4	3	6	5	167	2	1	1	..
,, VI.	11	6	5	1	2	8	6	5	224	4	1	..	..
,, VII.	7	2	5	2	3	2	6	1	186	1	..	..	..
	82	22	60	9	31	42	55	27	1441	17	6	2	3

DENTAL TREATMENT OF MATERNITY AND CHILD WELFARE CASES.

Mr. H. Yates, the Senior Dental Surgeon, carried out the following work in connection with Maternity and Child Welfare Cases :—

	1933	1934
Number of Sessions held	58	68
Number of Patients : Mothers	138	151
Children	76	79
Permanent Teeth Extracted	179	234
Permanent Teeth Filled	51	49
Temporary Teeth Extracted	87	104
Temporary Teeth Filled	19	21
Other Operations	37	44

ORTHOPÆDIC TREATMENT.

The arrangements in force for the care of deformity or crippling defect are as outlined in the Health Report for the year 1932.

TABLE 85.

THE WORK OF THE HEALTH VISITORS.
HOME VISITING.

	District I.	*District* II.	*District* III.	*District* IV.	*District* V.	*District* VI.	*District* VII.	*Totals*
Visits to Expectant Mothers—								
First Visits	39	70	54	23	27	84	103	400
Re-visits..	67	9	19	59	6	83	78	321
Ineffective Visits ..	16	10	12	5	14	1	3	61
Infants under 1 year—								
First Visits	172	220	247	122	151	210	224	1346
Re-visits..	516	751	822	557	672	881	578	4777
Ineffective Visits ..	42	124	182	102	65	13	138	666
Infants aged 1 year—								
Re-visits..	510	707	618	712	544	730	461	4282
Special Visits.. ..	4	3	2	...	1	5	4	19
Ineffective Visits ..	66	69	126	12	70	17	115	475
Children 2—5 years ..	784	1443	1213	620	1238	1406	1174	7878
Ineffective	128	128	193	6	151	45	316	967
Ophthalmia Neonatorum—								
First Visits	...	...	3	...	...	1	1	5
Re-visits..	...	1	...	...	2	...	2	5
Diarrhœa—								
First Visits	...	...	...	...	...	...	...	...
Re-visits..	...	...	...	...	...	...	...	...
Stillbirths	4	9	17	10	8	11	3	62
Doctors' Accounts ..	14	50	59	8	15	31	21	198
Milk (Mothers and Children Order)—								
Visits	...	3	...	...	1	...	...	4
Midwives—								
Routine	98	...	...	...	...	...	...	98
Special	5	...	...	...	...	...	...	5
Ineffective	47	...	...	...	...	...	...	47
Puerperal Fever Visits	...	3	6	2	3	5	1	20
Houses where deaths of infants occurred	4	13	7	4	...	...	3	31
Miscellaneous Visits..	51	44	15	39	40	61	14	264
TOTALS .. 1934 ..	2567	3657	3595	2281	3008	3584	3239	21931
1933 ..	3833	3865	3055	2300	2935	3499	3088	22575

The number of visits paid by the Health Visitors is slightly lower than in 1933, although in considerable excess of the figure for other years.

TABLE 86.

CLINIC SESSIONS ATTENDED

	District I.	*District* II.	*District* III.	*District* IV.	*District* V.	*District* VI.	*District* VII.	*Totals.*
Maternity and Child Welfare Clinics ..	79	108	114	96	130	112	129	768
Ante-Natal Clinics ..	12	15	17	93	18	15	21	191
Special V.D. Clinics ..	...	...	...	61	3	...	6	70
Other Clinics	23	28	33	37	36	35	30	222
TOTALS ..	114	151	164	287	187	162	186	1251
Total Houses visited ..	2067	3203	3086	1764	2603	3470	2566	18759
Total Persons visited. .	2433	3664	3629	2272	2966	3590	3222	21776

MATERNITY AND CHILD WELFARE ACT, 1918.

The following Table gives the number of families to whom assistance was rendered during 1934 under the Milk (Mothers and Children) Order.

TABLE 87.

Price.	No. on Jan. 1st, 1934.	New Cases during Year.	Cases Discontinued.	No. on Dec. 31st, 1934.
Free	276	297	311	262
Quarter Price .	37	87	93	31
Half-Price	14	51	39	26
TOTAL	327	435	443	319

For former years the corresponding figures (totals) are :—

1926	*117	316	238	†195
1927	*195	367	323	†239
1928	*239	363	482	†120
1929	*120	264	271	†113
1930	*113	322	265	†170
1931	*170	401	282	†289
1932	*289	521	439	†371
1933	*371	524	568	†327

* Beginning of Year. † End of Year.

During the year 25,233 pounds of dried milk have been supplied to expectant and nursing mothers and young children at a cost to the Local Authority of £1,558/12/1½. In 1933, 30,629 pounds were supplied at a cost of £1,812/2/0½. The nett cost in 1934, therefore, dropped by £253/9/11.

CARE OF ILLEGITIMATE CHILDREN.

No special provision is made by the Corporation for the care of illegitimate children or unmarried mothers; this work is undertaken at Viewfield Hostel by the Manchester Diocesan Association for Preventive and Rescue Work. The Health Department maintains a close co-operation with the authorities of the Hostel, and takes an active interest in the important work carried out there.

I am indebted to Miss Duckworth for the appended particulars respecting Viewfield :—

	Mothers.	*Babies.*
Number of Beds	13	13
Number of Cases Admitted, 1934 . . .	11	12
Number in Hostel, Jan. 1st, 1935	9	10
Number returned to relatives and friends ..	3	3
Number of Mothers sent to situations ..	7	—

At the end of the year there were five babies under one year. All of these were on four-hourly bottle feeds.

The Assistant Medical Officer for Maternity and Child Welfare visits Viewfield at regular intervals for the purpose of inspection and consultation with the Viewfield staff.

INSTITUTIONAL PROVISION FOR MOTHERS & CHILDREN.

Maternity beds are provided at Springfield and Queen's Park Hospital.

Special accommodation is available for infants and children at both the Royal Infirmary and Queen's Park Hospital.

NURSING HOMES REGISTRATION ACT, 1927.

On receipt of application for registration under the above Act, the premises are visited by either the Medical Officer of Health or by the lady Assistant Medical Officer of Health. This visit is the occasion of a survey of the available accommodation; and advice is given as to structural or other alterations required. The number of beds to be used for the reception of cases is also decided upon. Following registration, the Homes are visited quarterly by Dr. Baird, and at more frequent intervals by the Senior Health Visitor. All have been found satisfactory.

(*a*) *Maternity Homes* :—

At the beginning of the year there were six private maternity homes in Blackburn. During the year no new homes were registered, and one was discontinued. At the end of the year five labour beds and 12 lying-in beds were available in private maternity homes.

(*b*) *Nursing Homes* :—

At the end of the year there were four registered Nursing Homes in Blackburn, providing a total of 26 beds. During the year one new home was registered.

THE PRE-SCHOOL CHILD.

CAUSES OF DEATH IN CHILDREN FROM ONE TO FIVE YEARS OF AGE.

	1934	1933
Pneumonia and Bronchitis	11	15
Infectious Diseases (Non-Tubercular)	6	15
Tuberculosis (all forms)	1	2
Digestive System Diseases	4	3
All other causes	8	14
TOTALS	30	49

There are now 18 Nursery Classes in Blackburn, with approximate accommodation for 600 children under the age of five years. The work carried out at these classes has been fully described in the School Medical Report.

Many of the children in attendance at these Schools have been under supervision at the Child Welfare Centres. In order to secure continuity of observation the Assistant Medical Officer for Maternity and Child Welfare, who is also Assistant School Medical Officer, undertakes the School Medical Inspection of Nursery Class children.

INFANT LIFE PROTECTION

The appended Table gives particulars of infants nursed out for reward within the Borough :—

(*a*)	Number of Nursed Out Children, December, 1933 ...	16
(*b*)	Number of New Cases during 1934	9
(*c*)	Number who left the Borough during 1934	5
(*d*)	Transferred to Relatives	2
(*e*)	Adopted	1
(*f*)	Transferred to Wilpshire	2
(*g*)	Transferred to Langho Orphanage	1
(*h*)	Number at present in the Borough	14
(*i*)	Number found to be :—	
	(*a*) Satisfactory	14
	(*b*) Unsatisfactory	0

Inspection duties were undertaken by the Health Visiting Staff, who visit each case at least once in every six weeks. All the children have been found to be well cared for.

TABLE 88.

FEEDING OF INFANTS UP TO SIX MONTHS OF AGE—PERIOD FROM JULY 1ST, 1933, TO JUNE 30TH, 1934.

Condition at end of 6 months	Percentage of 1281 children investigated	Breast entirely.	BREAST FEEDING ALONE UP TO END OF						BREAST FEEDING JOINTLY WITH ARTIFICIAL UP TO END OF						Artificial fed entirely.	Not Fed.
			3 weeks	1st m'nth	2nd m'nth	3rd m'nth	4th m'nth	5th m'nth	1st m'nth	2nd m'nth	3rd m'nth	4th m'nth	5th m'nth	6th m'nth		
Satisfactory	85·0	46·7	4·6	6·4	7·2	6·7	3·6	2·6	0·7	1·4	2·09	0·45	0·6	0·7	16·2	..
Fairly Satisfactory.	7·1	36·2	3·2	4·3	10·8	5·4	5·4	3·2	1·8	2·1	...	1·8	2·1	...	24·1	...
Unsatisfactory ...	2·4	22·5	9·6	9·6	9·6	12·7	...	...	...	3·2	3·2	9·6	...	...	19·3	...
Dead	4·8	7·0	7·0	1·6	4·8	1·6	1·6	...	..	...	...	...	1·6	...	16·5	50%

PART VIII.

Miscellaneous.

TABLE 89

ULTRA-VIOLET LIGHT CLINIC.

Diagnosis	No. of Cases Treated			No. of Cases Discharged			No. of cases att'ding at end of year		Total number of all exposures given to cases attending	
	Total	Male	Female	Cured	Improved	No Change	M.	F.	Carbon Arc	Merc. Vap.
Debility	207	40	167	11	110	14	21	49	1998	1424
Rickets	90	51	39	5	31	8	21	19	2362	4
Anæmia	72	25	47	11	13	8	15	21	1962	782
Lung Conditions (Non-Tubercular)	57	34	23	12	8	10	14	6	1411	182
Tubercular Conditions	26	14	12	3	5	5	7	5	215	1741
Skin Diseases	12	4	8	3	5	2	..	2	152	357
Malnutrition	129	43	86	13	30	13	12	40	3123	178
Other Conditions	68	26	42	10	19	9	5	21	949	1067
TOTAL	661	237	424	68	221	69	95	163	12172	5735
CLINICS :—										
Total Health Dept. Clinic	521	180	341	37	205	68	77	131	5016	2506
Total Corporation Hospital Clinic	140	57	83	31	16	1	18	32	7156	3229
GRAND TOTAL	661	237	424	68	221	69	95	163	12172	5735
SECTIONS :—										
Tuberculosis	21	9	12	2	7	..	4	8	252	1018
Maternity & Child Welfare	351	92	259	4	150	20	47	109	4956	1563
School Medical	262	121	141	58	59	41	39	43	6646	2678
Other	27	15	12	4	5	8	5	3	318	476
GRAND TOTAL	661	237	424	68	221	69	95	163	12172	5735

Table 88 is a composite Table which contains particulars of cases treated at both the Health Department and Hospital Clinics.

BACTERIOLOGICAL AND PATHOLOGICAL EXAMINATIONS.

Facilities are available for the examination of pathological and bacteriological specimens at the Corporation Hospital, at the Royal Infirmary, and at the Public Health Laboratories at Manchester and Liverpool.

The appended Table gives particulars of examinations carried out during 1934.

For particulars of work carried out at the Corporation Hospital Laboratory see Table 59.

TABLE 90.

Blackburn & East Lancashire Royal Infirmary :—	
Specimens examined for Spirochætes	4
,, ,, Gonococci	2132
Manchester University :—	
Specimens examined for Spirochætes	1
,, ,, Gonococci	43
,, ,, Wasserman Test	1124
Fæces and urine for Typhoid	9
,, for Tuberculosis	1
Swabs for Hœmolytic Streptococci	2
Liverpool University :—	
Swabs for Hœmolytic Streptococci	83

LOCAL GOVERNMENT ACT, 1929.

No alterations or developments have taken place during the year.

The work of both Public Assistance and Health Committees is closely co-ordinated.

MENTAL DEFECTIVES.

The Local Authority does not provide institutional accommodation for mental defectives, nor has there been any change in the arrangements as described in the Report for 1933.

NURSING IN THE HOME.

Domiciliary nursing of cases of Measles, Whooping Cough, Diarrhœa, Puerperal Fever, Ophthalmia Neonatorum, Influenzal Pneumonia, and Tuberculosis is undertaken by the District Nursing Association.

The Corporation pay the Association an annual retaining fee of £35 for these services, with an additional payment of 8d. per visit.

The appended Table gives particulars of the work carried out by the District Nursing Association in this respect during 1934 :—

TABLE 91.

HOME NURSING BY DISTRICT NURSES.

Disease	On books Jan. 1st 1934	New Cases	Cured	Died	Hospital	Remaining end of 1934	Visits
Tuberculosis	5	15	4	6	6	4	1349
Pneumonia	4	105	77	24	4	4	2034
Puerperal Fever and Pyrexia ..	1	3	3	..	1	..	51
Ophthalmia Neonatorum ..	..	1	1	..	..	..	14
Diarrhœa	..	1	1	..	..	..	18
TOTAL	10	125	86	30	11	8	3466

HEALTH EDUCATION.

During the year 33 lectures (in addition to those given to school-children and their parents and those given by the Health Visitors on Mothercraft) were given by members of your staff to audiences totalling approximately 2,579.

PREVENTION OF BLINDNESS.

Beds are provided at the Corporation Hospital for the reception of selected cases of ophthalmia neonatorum; the District Nursing Association, under agreement with the Corporation, undertakes the domiciliary nursing of ophthalmia neonatorum, and during the year nursed one case, to which 14 visits were paid.

A special school, at Roe Lee, for the care of children suffering from severe visual defect provides accommodation for 20 children.

WELFARE OF THE BLIND.

The Blind Persons Act, 1920, Sec. 2, Sub-Section 1.

The Local Authority has made provision for the welfare of the blind through the Blackburn Workshops for the Blind and the Blackburn and Darwen Home Visiting Society. The Workshops are now administered by the Corporation.

In 1934 the Blind Persons Scheme cost the Corporation £4,647, allotted as under :—

Workshops for the Blind	£1,556.
Visiting Society	£434.
Other Blind Agencies	£264.
Grants to unemployable necessitous persons ...	£2,300.
Professional Charges	£88.
Sundry expenses	£5.

In addition to the above grants the Workshops received £720 and the Visiting Society £180 from the Joint Finance Committee for the Blind. This Committee is composed of representatives from the Local Authorities whose districts are served by the Workshops and Visiting Society. Its function is to organise and co-ordinate the raising of voluntary funds for the Blind.

The Blind Register contains particulars of 274 blind persons resident in Blackburn.

TABLE 92.

METEOROLOGY, 1934.

Corporation Hospital Station, Height 560 feet.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Amount of Bright Sunshine..	hrs. min. 40 45	hrs. min. 36 25	hrs. min. 67 30	hrs. min. 114 20	hrs. min. 140 0	hrs. min. 188 55	hrs. min. 224 5	hrs. min. 129 30	hrs. min. 130 10	hrs. min. 46 55	hrs. min. 32 35	hrs. min. 7 15	hrs. min. 1158 25
Average per day	1 19	1 18	2 10	3 49	4 31	6 18	7 14	4 11	4 20	1 31	1 3	0 14	..
Maximum amount in one day.	hrs. min. 5 20	hrs. min. 7 40	hrs. min. 9 50	hrs. min. 10 20	hrs. min. 11 20	hrs. min. 13 30	hrs. min. 13 30	hrs. min. 9 30	hrs. min. 9 20	hrs. min. 6 30	hrs. min. 6 50	hrs. min. 2 20	..
Total Rainfall (in inches)....	3·53	0·42	2·63	2·61	4·16	2·36	2·13	4·71	3·82	6·16	2·81	6·32	41·66
No. of days on which rain fell.	22	11	22	16	17	11	13	22	22	30	18	27	231
Av. Temp. at 9 a.m. (Fahr.)..	38·0	37·6	36·8	41·6	46·9	54·2	59·2	53·8	52·4	47·7	41·2	44·5	—
Temp. of earth at depth of 1ft.	38·8	38·7	38·5	43·3	49·4	56·0	60·0	58·4	54·5	50·7	42·9	44·5	—
Temp. of earth at depth of 4ft.	41·6	41·1	40·6	42·3	46·0	51·2	55·7	57·0	55·5	52·7	47·6	45·7	—
Highest Temp. in Shade	53·0	50·0	52·0	66·0	74·0	76·0	85·5	72·0	74·0	64·0	56·0	56·0	—
Lowest Temp. in Shade	27·0	25·0	27·0	27·0	36·0	40·0	48·0	48·0	44·0	32·0	27·0	35·0	—
Av. Temp. Sun (black bulb)..	37·9	42·6	48·2	58·06	54·6	75·7	110·4	66·0	107·0	38·5	33·7	35·3	—
Lowest Temp. on Grass	27·0	19·0	22·0	23·0	31·0	33·0	40·0	37·0	35·0	28·0	19·0	32·0	—
Highest cor. reading of barom.	30·583	30·781	30·200	30·143	30·335	30·293	30·276	30·210	30·286	30·259	30·457	30·146	—
Lowest cor. reading of barom.	28·680	29·598	28·528	28·986	29·243	29·460	29·462	29·253	29·397	28·910	29·126	28·505	—
Mean reading of barometer.. (uncorrected)	29·349	29·732	28·991	29·124	29·422	29·482	29·422	29·303	29·343	29·264	29·411	28·923	—